


pennsylvania
 DEPARTMENT OF TRANSPORTATION

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ADJUSTMENT

Project: 87181	Standard / PENNDOT Oversight NHS	Construction
Short Description: Lincoln Highway 2	Org Code: 0800	Section: 089
County: York	SR: 30	Municipality: PARADISE
District: 08	Group ID:	

Detail

Adjustment: 002	Amount: \$44,257.38
Type: Asphalt Price Adjustment	Amt Not Reversed/Recouped: \$44,257.38
Fund Code: 08	Remaining: \$0.00
Internal Order: 87028	
Comments:	

Attachments

	Document Title / Filename	Document Type	File Type	File Size	Upload Date	Description
	Bituminous adj	Price Index Calculations	Adobe PDF	6.32 MB	08/27/2012	price adj. for bituminous materials

Estimates

Estimate	Fund Code	Internal Order	Applied
014	08	87028	\$44,257.38

Reversals

Reversal	Fund Code	Internal Order	Amount
No records found.			

Audit Information

Created By	Created On	Modified By	Modified On
[REDACTED]/PennDOT	08/20/2012 01:26:12 PM	[REDACTED]/PennDOT	08/27/2012 11:46:09 AM

You are currently logged in as [REDACTED].

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Tue Sep 04 07:35:29 EDT 2012
 Official ECMS Date/Time

**PRICE ADJUSTMENT OF BITUMINOUS MATERIAL
(ENGLISH UNITS)**

SUMMARY

ITEM NO.	MONTH / YR PLACED	PRICE INCREASE	PRICE REBATE
9316-9115	Nov 2011	\$0.00 ✓	\$0.00
9316-9115	Nov 2011	\$0.00 ✓	\$0.00
0316-0526	Dec 2011	\$0.00 ✓	\$0.00
0460-0002	May 2012	\$328.59 ✓	\$0.00
0460-0002	May 2012	\$45.48 ✓	\$0.00
		\$0.00 ✓	\$0.00

Subtotal: \$374.07 ✓ \$0.00

Total: \$374.07 ✓

**PRICE ADJUSTMENT OF BITUMINOUS MATERIAL
(ENGLISH UNITS)**

ITEM NO.: 0460-0002

MONTH / YR PLACED: May 2012

IP = INDEX PRICE FOR MONTH MATERIAL WAS PLACED = 643.00 ✓
 IB = INDEX PRICE IN THE BID PROPOSAL = 546.00
 IP / IB = 1.17765568

WHEN THE RATIO IP/IB FALLS WITHIN THE RANGE OF 0.90 TO 1.10 NO PRICE ADJUSTMENT IS NEEDED
 WHEN THE RATIO IP/IB IS CALCULATED TO BE LESS THAN 0.90 , THE DEPT. WILL RECEIVE A PRICE REBATE
 WHEN THE RATIO IP/IB IS CALCULATED TO BE GREATER THAN 1.10 , THE CONTRACTOR WILL RECEIVE A PRICE INCREASE

MATERIAL PLACED:

DATE	GALLON
5/10/2012	1495
5/11/2012	1111
5/16/2012	1095
5/17/2012	810
5/18/2012	981
5/24/2012	288
TOTAL	5780

DATE	TON
TOTAL	0

DATE	SQ.YARD
TOTAL	0

GALLON BASIS:

BITUMEN TONNAGE (Q) = 0.004164 x VOLUME OF BIT. MAT. (Gallons) x SPECIFIC GRAVITY OF BIT. MAT. x % ASPHALT
 SPECIFIC GRAVITY OF BIT. MAT.* = 1.006244 VOLUME OF BIT. MAT. = 5780
 % ASPHALT** = 32.00%
 Q = 7.74982403

*SPECIFIC GRAVITY OF BIT. MAT. TO BE OBTAINED FROM THE BILL OF LADING PROVIDED WITH EACH SHIPMENT.
 **IF BIT. MAT. CONTAINS PG ASPHALT BINDER, % ASPHALT = 100%. IF BIT. MAT. CONTAINS EMULSIFIED OR CUT-BACK ASPHALT,
 USE MINIMUM ASPHALT % FOR THE EMULSION OR CUT-BACK, AS SPECIFIED IN BULLETIN 25.

GALLONS PER SQUARE YARD BASIS:

BITUMEN TONNAGE (Q) = 0.004164 x SURFACE AREA (SY) x ACTUAL RES. APPL. RATE (Gallons / SY) x SPECIFIC GRAVITY OF BIT.MAT.
 ACTUAL RESIDUE APPL. RATE* = SURFACE AREA =
 SPECIFIC GRAVITY OF BIT. MAT.** =
 Q = 0

*SEE INSTRUCTIONS FOR DETAILS ON COMPUTING THE ACTUAL RESIDUE APPL. RATE FOR THE SPECIFIC BITUMINOUS MATERIAL USED.
 **SPECIFIC GRAVITY OF BIT. MAT. TO BE OBTAINED FROM THE BILL OF LADING PROVIDED WITH EACH SHIPMENT.

SQUARE YARD BASIS:

BIT. MIXTURE TONNAGE PLACED = 0.000375 x AREA (SY) x DESIGN DEPTH (inches) x DESIGN DENSITY (lb / ft3)
 DESIGN DEPTH = SURFACE AREA =
 DESIGN DENSITY* =
 BIT. MIXTURE TONNAGE PLACED = 0
 BITUMEN TONNAGE (Q) = BIT. MIXTURE TONNAGE PLACED x % BITUMEN BY WEIGHT
 % BITUMEN BY WGT.* =
 Q = 0

*DESIGN DENSITY (Ndes DENSITY) AND % BITUMEN BY WGT. (VIRGIN AC%) OBTAINED FROM FORM TR-448A. DENSITY OF WATER = 62.4 lb / ft3.

TONNAGE BASIS:

BITUMEN TONNAGE (Q) = BIT. MIXTURE TONNAGE PLACED x % BITUMEN BY WEIGHT
 % BITUMEN BY WGT.* = BIT. MIXTURE TONNAGE = 0
 Q = 0

*IF BIT. MIXTURE CONTAINS PG ASPHALT BINDER, USE VIRGIN AC% FROM FORM TR-448A. IF BIT. MIXTURE CONTAINS EMULSIFIED ASPHALT,
 USE % EMULSION, FROM MIX DESIGN, MULTIPLIED BY MINIMUM ASPHALT % FOR THE EMULSION, AS SPECIFIED IN BULLETIN 25.

PRICE INCREASE = (IP / IB - 1.10) x BITUMEN TONNAGE (Q) x IB
 = (0.07765568) x (7.74982403) x (546.00)
 = **\$328.59**

PRICE REBATE = (0.90 - IP / IB) x BITUMEN TONNAGE (Q) x IB
 = () x () x ()
 =

PRICE ADJUSTMENT OF BITUMINOUS MATERIAL
(ENGLISH UNITS)

ITEM NO.: 0460-0002

MONTH / YR PLACED: May 2012

IP = INDEX PRICE FOR MONTH MATERIAL WAS PLACED =

643.00 ✓

IB = INDEX PRICE IN THE BID PROPOSAL =

546.00

IP / IB = 1.17765568

WHEN THE RATIO IP/IB FALLS WITHIN THE RANGE OF 0.90 TO 1.10 NO PRICE ADJUSTMENT IS NEEDED
WHEN THE RATIO IP/IB IS CALCULATED TO BE LESS THAN 0.90 , THE DEPT. WILL RECEIVE A PRICE REBATE
WHEN THE RATIO IP/IB IS CALCULATED TO BE GREATER THAN 1.10 , THE CONTRACTOR WILL RECEIVE A PRICE INCREASE

MATERIAL PLACED:

DATE	GALLON
5/30/2012	460
5/31/2012	340
TOTAL	800

DATE	TON
TOTAL	0

DATE	SQ.YARD
TOTAL	0

GALLON BASIS:

BITUMEN TONNAGE (Q) = 0.004164 x VOLUME OF BIT. MAT. (Gallons) x SPECIFIC GRAVITY OF BIT. MAT. x % ASPHALT

SPECIFIC GRAVITY OF BIT. MAT.* = 1.006244 VOLUME OF BIT. MAT. = 800

% ASPHALT** = 32.00%

Q = 1.07264

*SPECIFIC GRAVITY OF BIT. MAT. TO BE OBTAINED FROM THE BILL OF LADING PROVIDED WITH EACH SHIPMENT.
**IF BIT. MAT. CONTAINS PG ASPHALT BINDER, % ASPHALT = 100%. IF BIT. MAT. CONTAINS EMULSIFIED OR CUT-BACK ASPHALT, USE MINIMUM ASPHALT % FOR THE EMULSION OR CUT-BACK, AS SPECIFIED IN BULLETIN 25.

GALLONS PER SQUARE YARD BASIS:

BITUMEN TONNAGE (Q) = 0.004164 x SURFACE AREA (SY) x ACTUAL RES. APPL. RATE (Gallons / SY) x SPECIFIC GRAVITY OF BIT.MAT.

ACTUAL RESIDUE APPL. RATE* = SURFACE AREA =

SPECIFIC GRAVITY OF BIT. MAT.** =

Q = 0

*SEE INSTRUCTIONS FOR DETAILS ON COMPUTING THE ACTUAL RESIDUE APPL. RATE FOR THE SPECIFIC BITUMINOUS MATERIAL USED.
**SPECIFIC GRAVITY OF BIT. MAT. TO BE OBTAINED FROM THE BILL OF LADING PROVIDED WITH EACH SHIPMENT.

SQUARE YARD BASIS:

BIT. MIXTURE TONNAGE PLACED = 0.000375 x AREA (SY) x DESIGN DEPTH (inches) x DESIGN DENSITY (lb / ft3)

DESIGN DEPTH = SURFACE AREA =

DESIGN DENSITY* =

BIT. MIXTURE TONNAGE PLACED = 0

BITUMEN TONNAGE (Q) = BIT. MIXTURE TONNAGE PLACED x % BITUMEN BY WEIGHT

% BITUMEN BY WGT.* =

Q = 0

*DESIGN DENSITY (NDES DENSITY) AND % BITUMEN BY WGT. (VIRGIN AC%) OBTAINED FROM FORM TR-448A. DENSITY OF WATER = 62.4 lb / ft3.

TONNAGE BASIS:

BITUMEN TONNAGE (Q) = BIT. MIXTURE TONNAGE PLACED x % BITUMEN BY WEIGHT

% BITUMEN BY WGT.* = BIT. MIXTURE TONNAGE = 0

Q = 0

*IF BIT. MIXTURE CONTAINS PG ASPHALT BINDER, USE VIRGIN AC% FROM FORM TR-448A. IF BIT. MIXTURE CONTAINS EMULSIFIED ASPHALT, USE % EMULSION, FROM MIX DESIGN, MULTIPLIED BY MINIMUM ASPHALT % FOR THE EMULSION, AS SPECIFIED IN BULLETIN 25.

PRICE INCREASE = (IP / IB - 1.10) x BITUMEN TONNAGE (Q) x IB
 = (0.07765568) x (1.07264) x (546.00)
 = **\$45.48**

PRICE REBATE = (0.90 - IP / IB) x BITUMEN TONNAGE (Q) x IB
 = () x () x ()
 =

**PRICE ADJUSTMENT OF BITUMINOUS MATERIAL
(ENGLISH UNITS)**

SUMMARY

ITEM NO.	MONTH / YR PLACED	PRICE INCREASE	PRICE REBATE
0461-0001	Jun 2012	\$121.59 /	\$0.00
0461-0001	Jul 2012	\$1.96 /	\$0.00
0460-0002	Jun 2012	\$107.14 /	\$0.00
0460-0002	Jun 2012	\$65.49 /	\$0.00
PG 64-22 OIL	Nov 2011	\$0.00	\$0.00
PG 64-22 OIL	Dec 2011	\$0.00	\$0.00

Subtotal: \$296.18 / \$0.00

Total: \$296.18 /

**PRICE ADJUSTMENT OF BITUMINOUS MATERIAL
(ENGLISH UNITS)**

ITEM NO.: 0461-0001

MONTH / YR PLACED: Jun 2012

IP = INDEX PRICE FOR MONTH MATERIAL WAS PLACED =

IB = INDEX PRICE IN THE BID PROPOSAL =

IP / IB = 1.17399267

641.00 / 546.00

WHEN THE RATIO IP/IB FALLS WITHIN THE RANGE OF 0.90 TO 1.10 NO PRICE ADJUSTMENT IS NEEDED
 WHEN THE RATIO IP/IB IS CALCULATED TO BE LESS THAN 0.90 , THE DEPT. WILL RECEIVE A PRICE REBATE
 WHEN THE RATIO IP/IB IS CALCULATED TO BE GREATER THAN 1.10 , THE CONTRACTOR WILL RECEIVE A PRICE INCREASE

MATERIAL PLACED:

DATE	GALLON
TOTAL	0

DATE	TON
TOTAL	0

DATE	SQ.YARD
6/27/2012	1044
6/28/2012	798
TOTAL	1842

GALLON BASIS:

BITUMEN TONNAGE (Q) = 0.004164 x VOLUME OF BIT. MAT. (Gallons) x SPECIFIC GRAVITY OF BIT. MAT. x % ASPHALT

SPECIFIC GRAVITY OF BIT. MAT.* = VOLUME OF BIT. MAT. =
 % ASPHALT** =
 Q =

*SPECIFIC GRAVITY OF BIT. MAT. TO BE OBTAINED FROM THE BILL OF LADING PROVIDED WITH EACH SHIPMENT.
 **IF BIT. MAT. CONTAINS PG ASPHALT BINDER, % ASPHALT = 100%. IF BIT. MAT. CONTAINS EMULSIFIED OR CUT-BACK ASPHALT, USE MINIMUM ASPHALT % FOR THE EMULSION OR CUT-BACK, AS SPECIFIED IN BULLETIN 25.

GALLONS PER SQUARE YARD BASIS:

BITUMEN TONNAGE (Q) = 0.004164 x SURFACE AREA (SY) x ACTUAL RES. APPL. RATE (Gallons / SY) x SPECIFIC GRAVITY OF BIT.MAT.

ACTUAL RESIDUE APPL. RATE* = SURFACE AREA =
 SPECIFIC GRAVITY OF BIT. MAT.** =
 Q =

*SEE INSTRUCTIONS FOR DETAILS ON COMPUTING THE ACTUAL RESIDUE APPL. RATE FOR THE SPECIFIC BITUMINOUS MATERIAL USED.
 **SPECIFIC GRAVITY OF BIT. MAT. TO BE OBTAINED FROM THE BILL OF LADING PROVIDED WITH EACH SHIPMENT.

SQUARE YARD BASIS:

BIT. MIXTURE TONNAGE PLACED = 0.000375 x AREA (SY) x DESIGN DEPTH (inches) x DESIGN DENSITY (lb / ft3)

DESIGN DEPTH = SURFACE AREA =
 DESIGN DENSITY* =
 BIT. MIXTURE TONNAGE PLACED =

BITUMEN TONNAGE (Q) = BIT. MIXTURE TONNAGE PLACED x % BITUMEN BY WEIGHT

% BITUMEN BY WGT.* =
 Q =

*DESIGN DENSITY (Ndes DENSITY) AND % BITUMEN BY WGT. (VIRGIN AC%) OBTAINED FROM FORM TR-448A. DENSITY OF WATER = 62.4 lb / ft3.

TONNAGE BASIS:

BITUMEN TONNAGE (Q) = BIT. MIXTURE TONNAGE PLACED x % BITUMEN BY WEIGHT

% BITUMEN BY WGT.* = BIT. MIXTURE TONNAGE =
 Q =

*IF BIT. MIXTURE CONTAINS PG ASPHALT BINDER, USE VIRGIN AC% FROM FORM TR-448A. IF BIT. MIXTURE CONTAINS EMULSIFIED ASPHALT, USE % EMULSION, FROM MIX DESIGN, MULTIPLIED BY MINIMUM ASPHALT % FOR THE EMULSION, AS SPECIFIED IN BULLETIN 25.

PRICE INCREASE = (IP / IB - 1.10) x BITUMEN TONNAGE (Q) x IB
 = (0.07399267) x (3.00974253) x (546.00)
 = **\$121.59**

PRICE REBATE = (0.90 - IP / IB) x BITUMEN TONNAGE (Q) x IB
 = () x () x ()
 =

**PRICE ADJUSTMENT OF BITUMINOUS MATERIAL
(ENGLISH UNITS)**

ITEM NO.: 0460-0002

MONTH / YR PLACED: Jun 2012

IP = INDEX PRICE FOR MONTH MATERIAL WAS PLACED =

IB = INDEX PRICE IN THE BID PROPOSAL =

IP / IB = 1.17399267

641.00 ✓
546.00

WHEN THE RATIO IP/IB FALLS WITHIN THE RANGE OF 0.90 TO 1.10 NO PRICE ADJUSTMENT IS NEEDED
WHEN THE RATIO IP/IB IS CALCULATED TO BE LESS THAN 0.90 , THE DEPT. WILL RECEIVE A PRICE REBATE
WHEN THE RATIO IP/IB IS CALCULATED TO BE GREATER THAN 1.10 , THE CONTRACTOR WILL RECEIVE A PRICE INCREASE

MATERIAL PLACED:

DATE	GALLON
6/4/2012	91
6/5/2012	414
6/6/2012	434
6/8/2012	381
6/13/2012	368
6/14/2012	290
TOTAL	1978

DATE	TON
TOTAL	0

DATE	SQ.YARD
TOTAL	0

GALLON BASIS:

BITUMEN TONNAGE (Q) = 0.004164 x VOLUME OF BIT. MAT. (Gallons) x SPECIFIC GRAVITY OF BIT. MAT. x % ASPHALT

SPECIFIC GRAVITY OF BIT. MAT.* = 1.006244 VOLUME OF BIT. MAT. = 1978
% ASPHALT** = 32.00%
Q = 2.65210241

*SPECIFIC GRAVITY OF BIT. MAT. TO BE OBTAINED FROM THE BILL OF LADING PROVIDED WITH EACH SHIPMENT.
**IF BIT. MAT. CONTAINS PG ASPHALT BINDER, % ASPHALT = 100%. IF BIT. MAT. CONTAINS EMULSIFIED OR CUT-BACK ASPHALT, USE MINIMUM ASPHALT % FOR THE EMULSION OR CUT-BACK, AS SPECIFIED IN BULLETIN 25.

GALLONS PER SQUARE YARD BASIS:

BITUMEN TONNAGE (Q) = 0.004164 x SURFACE AREA (SY) x ACTUAL RES. APPL. RATE (Gallons / SY) x SPECIFIC GRAVITY OF BIT.MAT.

ACTUAL RESIDUE APPL. RATE* = SURFACE AREA =
SPECIFIC GRAVITY OF BIT. MAT.** =
Q = 0

*SEE INSTRUCTIONS FOR DETAILS ON COMPUTING THE ACTUAL RESIDUE APPL. RATE FOR THE SPECIFIC BITUMINOUS MATERIAL USED.
**SPECIFIC GRAVITY OF BIT. MAT. TO BE OBTAINED FROM THE BILL OF LADING PROVIDED WITH EACH SHIPMENT.

SQUARE YARD BASIS:

BIT. MIXTURE TONNAGE PLACED = 0.000375 x AREA (SY) x DESIGN DEPTH (inches) x DESIGN DENSITY (lb / ft3)

DESIGN DEPTH = SURFACE AREA =
DESIGN DENSITY* =
BIT. MIXTURE TONNAGE PLACED = 0

BITUMEN TONNAGE (Q) = BIT. MIXTURE TONNAGE PLACED x % BITUMEN BY WEIGHT

% BITUMEN BY WGT.* =
Q = 0

*DESIGN DENSITY (Ndes DENSITY) AND % BITUMEN BY WGT. (VIRGIN AC%) OBTAINED FROM FORM TR-448A. DENSITY OF WATER = 62.4 lb / ft3.

TONNAGE BASIS:

BITUMEN TONNAGE (Q) = BIT. MIXTURE TONNAGE PLACED x % BITUMEN BY WEIGHT

% BITUMEN BY WGT.* = BIT. MIXTURE TONNAGE = 0
Q = 0

*IF BIT. MIXTURE CONTAINS PG ASPHALT BINDER, USE VIRGIN AC% FROM FORM TR-448A. IF BIT. MIXTURE CONTAINS EMULSIFIED ASPHALT, USE % EMULSION, FROM MIX DESIGN, MULTIPLIED BY MINIMUM ASPHALT % FOR THE EMULSION, AS SPECIFIED IN BULLETIN 25.

PRICE INCREASE = (IP / IB - 1.10) x BITUMEN TONNAGE (Q) x IB
= (0.07399267) x (2.65210241) x (546.00)
= **\$107.14**

PRICE REBATE = (0.90 - IP / IB) x BITUMEN TONNAGE (Q) x IB
= () x () x ()
=

PRICE ADJUSTMENT OF BITUMINOUS MATERIAL
(ENGLISH UNITS)

SUMMARY

ITEM NO.	MONTH / YR PLACED	PRICE INCREASE	PRICE REBATE
0409-1595	May 2012	\$2,840.08 ✓	\$0.00
0409-1595	May 2012	\$13,201.49 ✓	\$0.00
0409-0595	Jun 2012	\$45.38 ✓	\$0.00
9409-4951	May 2012	\$2,435.65 ✓	\$0.00
9409-4951	Jun 2012	\$16,290.13 ✓	\$0.00
		\$0.00	\$0.00

Subtotal:

\$34,812.73 ✓	\$0.00
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Total:

\$34,812.73 ✓

**PRICE ADJUSTMENT OF BITUMINOUS MATERIAL
(ENGLISH UNITS)**

ITEM NO.: 9409-4951

MONTH / YR PLACED: May 2012

IP = INDEX PRICE FOR MONTH MATERIAL WAS PLACED =

643.00 ✓

IB = INDEX PRICE IN THE BID PROPOSAL =

546.00

IP / IB = 1.17765568

WHEN THE RATIO IP/IB FALLS WITHIN THE RANGE OF 0.90 TO 1.10 NO PRICE ADJUSTMENT IS NEEDED
 WHEN THE RATIO IP/IB IS CALCULATED TO BE LESS THAN 0.90 , THE DEPT. WILL RECEIVE A PRICE REBATE
 WHEN THE RATIO IP/IB IS CALCULATED TO BE GREATER THAN 1.10 , THE CONTRACTOR WILL RECEIVE A PRICE INCREASE

MATERIAL PLACED:

DATE	GALLON
TOTAL	0

DATE	TON
TOTAL	0

DATE	SQ.YARD
5/31/2012	10020
TOTAL	10020

GALLON BASIS:

BITUMEN TONNAGE (Q) = 0.004164 x VOLUME OF BIT. MAT. (Gallons) x SPECIFIC GRAVITY OF BIT. MAT. x % ASPHALT

SPECIFIC GRAVITY OF BIT. MAT.* =

VOLUME OF BIT. MAT. = 0

% ASPHALT** =

Q = 0

*SPECIFIC GRAVITY OF BIT. MAT. TO BE OBTAINED FROM THE BILL OF LADING PROVIDED WITH EACH SHIPMENT.

**IF BIT. MAT. CONTAINS PG ASPHALT BINDER, % ASPHALT = 100%. IF BIT. MAT. CONTAINS EMULSIFIED OR CUT-BACK ASPHALT, USE MINIMUM ASPHALT % FOR THE EMULSION OR CUT-BACK, AS SPECIFIED IN BULLETIN 25.

GALLONS PER SQUARE YARD BASIS:

BITUMEN TONNAGE (Q) = 0.004164 x SURFACE AREA (SY) x ACTUAL RES. APPL. RATE (Gallons / SY) x SPECIFIC GRAVITY OF BIT.MAT.

ACTUAL RESIDUE APPL. RATE* =

SURFACE AREA =

SPECIFIC GRAVITY OF BIT. MAT.** =

Q = 0

*SEE INSTRUCTIONS FOR DETAILS ON COMPUTING THE ACTUAL RESIDUE APPL. RATE FOR THE SPECIFIC BITUMINOUS MATERIAL USED.

**SPECIFIC GRAVITY OF BIT. MAT. TO BE OBTAINED FROM THE BILL OF LADING PROVIDED WITH EACH SHIPMENT.

SQUARE YARD BASIS:

BIT. MIXTURE TONNAGE PLACED = 0.000375 x AREA (SY) x DESIGN DEPTH (inches) x DESIGN DENSITY (lb / ft3)

DESIGN DEPTH = 2.00

SURFACE AREA = 10020.0000

DESIGN DENSITY* = 152.88

BIT. MIXTURE TONNAGE PLACED = 1148.8932

BITUMEN TONNAGE (Q) = BIT. MIXTURE TONNAGE PLACED x % BITUMEN BY WEIGHT

% BITUMEN BY WGT.* = 5.00%

Q = 57.44466

*DESIGN DENSITY (Ndes DENSITY) AND % BITUMEN BY WGT. (VIRGIN AC%) OBTAINED FROM FORM TR-448A. DENSITY OF WATER = 62.4 lb / ft3.

TONNAGE BASIS:

BITUMEN TONNAGE (Q) = BIT. MIXTURE TONNAGE PLACED x % BITUMEN BY WEIGHT

% BITUMEN BY WGT.* =

BIT. MIXTURE TONNAGE = 0

Q = 0

*IF BIT. MIXTURE CONTAINS PG ASPHALT BINDER, USE VIRGIN AC% FROM FORM TR-448A. IF BIT. MIXTURE CONTAINS EMULSIFIED ASPHALT, USE % EMULSION, FROM MIX DESIGN, MULTIPLIED BY MINIMUM ASPHALT % FOR THE EMULSION, AS SPECIFIED IN BULLETIN 25.

PRICE INCREASE = (IP / IB - 1.10) x BITUMEN TONNAGE (Q) x IB

$$= (0.07765568) \times (57.44466) \times (546.00)$$

$$= \mathbf{\$2,435.65}$$

PRICE REBATE = (0.90 - IP / IB) x BITUMEN TONNAGE (Q) x IB

$$= () \times () \times ()$$

$$=$$

**PRICE ADJUSTMENT OF BITUMINOUS MATERIAL
(ENGLISH UNITS)**

SUMMARY

ITEM NO.	MONTH / YR PLACED	PRICE INCREASE	PRICE REBATE
0409-0555	Jun 2012	\$8,450.20 /	\$0.00
0409-0555	Jun 2012	\$78.22 /	\$0.00
0316-0526	Nov 2011	\$0.00	\$0.00
0316-0526	Dec 2011	\$0.00	\$0.00
0316-0526	Apr 2012	\$171.38 /	\$0.00
0316-0526	May 2012	\$74.60 /	\$0.00

Subtotal: \$8,774.40 \$0.00

Total: \$8,774.40

**PRICE ADJUSTMENT OF BITUMINOUS MATERIAL
(ENGLISH UNITS)**

ITEM NO.: 0316-0526

MONTH / YR PLACED: Dec 2011

IP = INDEX PRICE FOR MONTH MATERIAL WAS PLACED = 593.00 ✓
 IB = INDEX PRICE IN THE BID PROPOSAL = 546.00
 IP / IB = 1.08608059

WHEN THE RATIO IP/IB FALLS WITHIN THE RANGE OF 0.90 TO 1.10 NO PRICE ADJUSTMENT IS NEEDED
 WHEN THE RATIO IP/IB IS CALCULATED TO BE LESS THAN 0.90, THE DEPT. WILL RECEIVE A PRICE REBATE
 WHEN THE RATIO IP/IB IS CALCULATED TO BE GREATER THAN 1.10, THE CONTRACTOR WILL RECEIVE A PRICE INCREASE

MATERIAL PLACED:

DATE	GALLON
TOTAL	0

DATE	TON
TOTAL	0

DATE	SQ.YARD
12/2/2011	48.52
TOTAL	48.52

GALLON BASIS:

BITUMEN TONNAGE (Q) = 0.004164 x VOLUME OF BIT. MAT. (Gallons) x SPECIFIC GRAVITY OF BIT. MAT. x % ASPHALT
 SPECIFIC GRAVITY OF BIT. MAT.* = VOLUME OF BIT. MAT. = 0
 % ASPHALT** =
 Q = 0

*SPECIFIC GRAVITY OF BIT. MAT. TO BE OBTAINED FROM THE BILL OF LADING PROVIDED WITH EACH SHIPMENT.
 **IF BIT. MAT. CONTAINS PG ASPHALT BINDER, % ASPHALT = 100%. IF BIT. MAT. CONTAINS EMULSIFIED OR CUT-BACK ASPHALT, USE MINIMUM ASPHALT % FOR THE EMULSION OR CUT-BACK, AS SPECIFIED IN BULLETIN 25.

GALLONS PER SQUARE YARD BASIS:

BITUMEN TONNAGE (Q) = 0.004164 x SURFACE AREA (SY) x ACTUAL RES. APPL. RATE (Gallons / SY) x SPECIFIC GRAVITY OF BIT.MAT.
 ACTUAL RESIDUE APPL. RATE* = SURFACE AREA =
 SPECIFIC GRAVITY OF BIT. MAT.** =
 Q = 0

*SEE INSTRUCTIONS FOR DETAILS ON COMPUTING THE ACTUAL RESIDUE APPL. RATE FOR THE SPECIFIC BITUMINOUS MATERIAL USED.
 **SPECIFIC GRAVITY OF BIT. MAT. TO BE OBTAINED FROM THE BILL OF LADING PROVIDED WITH EACH SHIPMENT.

SQUARE YARD BASIS:

BIT. MIXTURE TONNAGE PLACED = 0.000375 x AREA (SY) x DESIGN DEPTH (inches) x DESIGN DENSITY (lb / ft3)
 DESIGN DEPTH = 6.00 SURFACE AREA = 48.5200
 DESIGN DENSITY* = 155.7504
 BIT. MIXTURE TONNAGE PLACED = 17.0032712
 BITUMEN TONNAGE (Q) = BIT. MIXTURE TONNAGE PLACED x % BITUMEN BY WEIGHT
 % BITUMEN BY WGT.* = 3.20%
 Q = 0.54410468

*DESIGN DENSITY (Ndes DENSITY) AND % BITUMEN BY WGT. (VIRGIN AC%) OBTAINED FROM FORM TR-448A. DENSITY OF WATER = 62.4 lb / ft3.

TONNAGE BASIS:

BITUMEN TONNAGE (Q) = BIT. MIXTURE TONNAGE PLACED x % BITUMEN BY WEIGHT
 % BITUMEN BY WGT.* = BIT. MIXTURE TONNAGE = 0
 Q = 0

*IF BIT. MIXTURE CONTAINS PG ASPHALT BINDER, USE VIRGIN AC% FROM FORM TR-448A. IF BIT. MIXTURE CONTAINS EMULSIFIED ASPHALT, USE % EMULSION, FROM MIX DESIGN, MULTIPLIED BY MINIMUM ASPHALT % FOR THE EMULSION, AS SPECIFIED IN BULLETIN 25.

PRICE INCREASE = (IP / IB - 1.10) x BITUMEN TONNAGE.(Q) x IB
 = () x () x ()
 =

PRICE REBATE = (0.90 - IP / IB) x BITUMEN TONNAGE (Q) x IB
 = () x () x ()
 =

**PRICE ADJUSTMENT OF BITUMINOUS MATERIAL
(ENGLISH UNITS)**

ITEM NO.: 0316-0526

MONTH / YR PLACED: May 2012

IP = INDEX PRICE FOR MONTH MATERIAL WAS PLACED = 643.00
 IB = INDEX PRICE IN THE BID PROPOSAL = 546.00
 IP / IB = 1.17765568

WHEN THE RATIO IP/IB FALLS WITHIN THE RANGE OF 0.90 TO 1.10 NO PRICE ADJUSTMENT IS NEEDED
 WHEN THE RATIO IP/IB IS CALCULATED TO BE LESS THAN 0.90, THE DEPT. WILL RECEIVE A PRICE REBATE
 WHEN THE RATIO IP/IB IS CALCULATED TO BE GREATER THAN 1.10, THE CONTRACTOR WILL RECEIVE A PRICE INCREASE

MATERIAL PLACED:

DATE	GALLON
TOTAL	0

DATE	TON
TOTAL	0

DATE	SQ. YARD
5/7/2012	26
5/22/2012	130.89
TOTAL	156.89

GALLON BASIS:

BITUMEN TONNAGE (Q) = 0.004164 x VOLUME OF BIT. MAT. (Gallons) x SPECIFIC GRAVITY OF BIT. MAT. x % ASPHALT
 SPECIFIC GRAVITY OF BIT. MAT.* = VOLUME OF BIT. MAT. = 0
 % ASPHALT** =
 Q = 0

*SPECIFIC GRAVITY OF BIT. MAT. TO BE OBTAINED FROM THE BILL OF LADING PROVIDED WITH EACH SHIPMENT.
 **IF BIT. MAT. CONTAINS PG ASPHALT BINDER, % ASPHALT = 100%. IF BIT. MAT. CONTAINS EMULSIFIED OR CUT-BACK ASPHALT,
 USE MINIMUM ASPHALT % FOR THE EMULSION OR CUT-BACK, AS SPECIFIED IN BULLETIN 25.

GALLONS PER SQUARE YARD BASIS:

BITUMEN TONNAGE (Q) = 0.004164 x SURFACE AREA (SY) x ACTUAL RES. APPL. RATE (Gallons / SY) x SPECIFIC GRAVITY OF BIT.MAT.
 ACTUAL RESIDUE APPL. RATE* = SURFACE AREA =
 SPECIFIC GRAVITY OF BIT. MAT.** =
 Q = 0

*SEE INSTRUCTIONS FOR DETAILS ON COMPUTING THE ACTUAL RESIDUE APPL. RATE FOR THE SPECIFIC BITUMINOUS MATERIAL USED.
 **SPECIFIC GRAVITY OF BIT. MAT. TO BE OBTAINED FROM THE BILL OF LADING PROVIDED WITH EACH SHIPMENT.

SQUARE YARD BASIS:

BIT. MIXTURE TONNAGE PLACED = 0.000375 x AREA (SY) x DESIGN DEPTH (inches) x DESIGN DENSITY (lb / ft³)
 DESIGN DEPTH = 6.00 SURFACE AREA = 156.8900
 DESIGN DENSITY* = 155.7504
 BIT. MIXTURE TONNAGE PLACED = 54.9802806
 BITUMEN TONNAGE (Q) = BIT. MIXTURE TONNAGE PLACED x % BITUMEN BY WEIGHT
 % BITUMEN BY WGT.* = 3.20%
 Q = 1.75936898

*DESIGN DENSITY (Ndes DENSITY) AND % BITUMEN BY WGT. (VIRGIN AC%) OBTAINED FROM FORM TR-448A. DENSITY OF WATER = 62.4 lb / ft³

TONNAGE BASIS:

BITUMEN TONNAGE (Q) = BIT. MIXTURE TONNAGE PLACED x % BITUMEN BY WEIGHT
 % BITUMEN BY WGT.* = BIT. MIXTURE TONNAGE = 0
 Q = 0

*IF BIT. MIXTURE CONTAINS PG ASPHALT BINDER, USE VIRGIN AC% FROM FORM TR-448A. IF BIT. MIXTURE CONTAINS EMULSIFIED ASPHALT,
 USE % EMULSION, FROM MIX DESIGN, MULTIPLIED BY MINIMUM ASPHALT % FOR THE EMULSION, AS SPECIFIED IN BULLETIN 25.

PRICE INCREASE = (IP / IB - 1.10) x BITUMEN TONNAGE (Q) x IB
 = (0.07765568) x (1.75936898) x (546.00)
 = \$74.60

PRICE REBATE = (0.90 - IP / IB) x BITUMEN TONNAGE (Q) x IB
 = () x () x ()
 =



HAMMAKER EAST, LTD.

Chambersburg Plant

118 Siloam Road
Chambersburg, PA 17201

Plant Manager
Brook Statler

Office: 717-263-0434
Fax: 717-263-7076

TRUCK BILL OF LADING
DELIVERY RECEIPT AND INVOICE

BOL#: 415006877

Charge To: Daniel B Krieg

Carrier: Desitination: 6/26/2012

Truck ID: K-10 K-10

Truck/Trailer: P.O. #:

Driver: [Redacted]

Product	Description	Tank
30.1005	E-1 Prime	9
wt. per gallon	8.17	penetration 200+
spicific gravity	0.981	batch 1
asphalt %	42.4 %	
viscosity	27 sec	

Gross:	Tare:	Net Lbs:	Total Net (GAL):
30620	18680	11940	1,468

"This is to certify that this shipment of 1,467.55 GAL of E-1 Prime has been tested and conforms to Bulletin #25." [Redacted Signature]

I hereby certify that this material has been checked as to compatibility w/job referenced aggregate and was loaded into above designated trailer on date stated; and that this trailer contained no foreign matter that would contaminate the above described material when loaded.

	Qty	Rate	Amount
Mat.	1,467.55 GAL		
Freight			
Tax	PASLS		
Total			

Current Load: E-1 Prime

Prev. Load: GSB-88

Signed: [Redacted Signature]

K-10
(Authorized Representative of transporter)

In Case of Emergency: 1-800-424-9300 CHEMTREC, IF DC USE 1-202-483-7616

Warranty - All products manufactured by use are warranted to be first class materials and free from defects in material and workmanship. We make no warranty, expressed or implied, as to suitability of any of our products for any particular use, and we shall not be subject to liability from any damages resulting from their use in operation not under our direct control.

Contractor: Pennsy Supply - McMinns
 County: York
 Routes: SR 0030-089
 District#: 8-0
 P.O. or ECMS#: 87181

We wish to submit the following information for approval for use on the above mentioned project. Specification date or year 2007

Job Mix Formula				
Master Design Number	12-44231	12-25533	12-14231	
Type Material and course	25 mm	12.5 mm (E)	9.5 mm (M)	
Anticipated quantity	2,500	9,915	8,186	

Raw Materials	Type	Producer
Asphalt Cement	PG 76-22	NuStar - BALT., MD.
Asphalt Cement	PG 64-22	NuStar - BALT., MD.
Course Agg. 1	No.8	YORK BUILDING PRODUCTS CO., INC. - YORK, PA.
Course Agg. 2	No.57	YORK BUILDING PRODUCTS CO., INC. - YORK, PA.
Course Agg. 3	No.9	YORK BUILDING PRODUCTS CO., INC. - YORK, PA.
Course Agg. 4	No.467	YORK BUILDING PRODUCTS CO., INC. - YORK, PA.
Course Agg. 5	RAP	YORK BUILDING PRODUCTS CO., INC. - YORK, PA.
Fine Agg. 1	SAND	YORK BUILDING PRODUCTS CO., INC. - YORK, PA.
Course Agg. 6	No.8 (E)	COUNTY LINE QUARRY - WRIGHTSVILLE, PA
Course Agg. 7	No.7 (E)	COUNTY LINE QUARRY - WRIGHTSVILLE, PA
Course Agg. 8		

JOB MIX FORMULA (gradation)

JMF #	50 mm	37.5	25	19	12.5	9.5	4.75	2.36	1.18	0.600	0.300	0.150	0.075
	2"	1 1/2	1	3/4	1/2	3/8	4	8	16	30	50	100	200
12-44231		100	96	85	60		33	25	16	11	8	5	3
12-25533				100	96	82	44	30	19	14	9	7	4
12-14231					100	95	61	35	22	15	11	7	4.5

MIX CHARACTERISTICS

JMF #	Virgin Asphalt Content	Theor. Sp. Gr.	Lab Sp. Gr.	Filler %	2.36 #8	12.5 1/2"	Voids	VMA	VFA	Stability #	Stability N	Flow	N DES **
12-44231	3.2	2.601	2.496		25	60	4.0	13.0	69				100
12-25533	5.0	2.551	2.450		30	96	4.0	14.8	73				100
12-14231	4.5	2.541	2.441		35	100	4.0	15.9	75				100

* N DES = Number of Gyration at Design Level for Gyratory (G) JMF or # of Blows for Marshall (M) JMF

**NDES - 50 = (0 < 0.3), 75 = (0.3 < 3), 100 = (3 < 30), & 125 = (> 30)

Approved Contractor's Representative _____ /s/ _____ Date 4/13/2012
 Approved D.O.T. Inspector _____ Date _____
 Approved Materials Engineer _____ /s/ _____ Date 4/16/2012
 Approved District Engineer _____ Date _____

District Engineer
Commonwealth of Pennsylvania
Department of Transportation

Date 8-Jun-12
 Plant York Building Products Co., Inc.
 Location York, PA.
 ID YOP66B41

Re: Contractor Pennsy Supply - McMinns
 County York
 Routes SR 0030-089
 District# 8-0
 P.O. or ECMS# 87181

We wish to submit the following information for approval for use on the above mentioned project. Specification date
 or year 2007

Job Mix Formula				
Master Design Number	12-24431			
Type Material and course	12.5 mm			
Anticipated quantity	4,600			

Raw Materials	Type	Producer
Asphalt Cement		
Asphalt Cement	PG 64-22	NuStar - BALT, MD.
Course Agg. 1	No.8	YORK BUILDING PRODUCTS CO., INC. - YORK, PA.
Course Agg. 2	No.7	YORK BUILDING PRODUCTS CO., INC. - YORK, PA.
Course Agg. 3	No.9	YORK BUILDING PRODUCTS CO., INC. - YORK, PA.
Course Agg. 4		
Course Agg. 5	RAP	YORK BUILDING PRODUCTS CO., INC. - YORK, PA.
Fine Agg. 1	SAND	YORK BUILDING PRODUCTS CO., INC. - YORK, PA.
Course Agg. 6		
Course Agg. 7		
Course Agg. 8		

JOB MIX FORMULA (gradation)

JMF #	50 mm	37.5	25	19	12.5	9.5	4.75	2.36	1.18	0.600	0.300	0.150	0.075
	2"	1 1/2	1	3/4	1/2	3/8	4	8	16	30	50	100	200
12-24431				100	98	86	51	32	20	14	10	7	4

MIX CHARACTERISTICS

JMF #	Virgin Asphalt Content	Theor. Sp. Gr.	Lab Sp. Gr.	Filler %	2.36 #8	12.5 1/2"	Voids	VMA	VFA	Stability #	Stability N	Flow	N DES **
12-24431	4.3	2.566	2.463		32	98	4.0	15.1	73				100

* N DES = Number of Gyration at Design Level for Gyrotory (G) JMF or # of Blows for Marshall (M) JMF
 **NDES - 50 = (0 < 0.3), 75 = (0.3 < 3), 100 = (3 < 30), & 125 = (> 30)

Approved Contractor's Representative _____ s/ _____ Date 6/8/2012
 Approved D.O.T. Inspector _____ Date _____
 Approved Materials Engineer _____ Date 6/12/2012
 Approved District Engineer _____ Date _____