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<u>STATE</u> <u>OF</u> <u>TENNESSEE</u>

(Rev. 10-01-06) (Rev. 11-03-08) (Rev. 01-03-13) January 1, 2015

# SPECIAL PROVISION REGARDING PAYMENT ADJUSTMENT FOR FUEL

This special provision covers the method of payment adjustment for fuel price increases or decreases. Payment adjustments will be made in monthly increments based on the estimated fuel consumed on major items of work, the estimated price per gallon of fuel at the time of letting, and the percentage change of the Producer Price Index for Light fuel oils, Series ID Number WPU0573, published by the U.S. Department of Labor, Bureau of Labor Statistics.

The estimated price per gallon of fuel for this contract is \$2.09.

The <u>September 2019</u> Price Index (Ib) for light fuel oils shall be used for this contract. Adjustments will be based on the price index in effect for the month in which the item was installed.

Fuel consumption for payment adjustment shall be based on the following:

Item Number	Description of Work		Unit of measure	
203	Any Road and Drainage Excavation	0.25	Cubic Yard	
203	Any Borrow Excavation (Rock)	0.36	Cubic Yard	
203	Any Borrow Excavation (Other than Solid Rock)		Cubic Yard	
203	Any Borrow Excavation (Rock)	0.16	Ton	
203	Any Borrow Excavation (Other than Solid Rock)		Ton	
203-05	Undercutting	0.25	Cubic Yard	
203	Any Embankment (in-place)	0.25	Cubic Yard	
303, 309, 312	Any Aggregate Base	0.79	Ton	
313, 501	Treated Permeable Base or Lean Concrete Base		Square Yard	
307	Any Bituminous Plant Mix Base (HM)		Ton	
411	Any Bituminous Concrete Surface (HM)	2.98	Ton	
501	Any Portland Cement Concrete Pavement			
	≤ 10 in. thickness	0.25	0.25 Square Yard	
	> 10 in. thickness	0.30	Square Yard	

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No payment adjustment for fuel shall be made on any item of work which is not listed above.

No payment adjustment for fuel shall be made unless the price index varies 5% or more from the index indicated in this Special Provision.

Where the price index varies 5% or more, the payment adjustment will be made as follows:

$$PA = [(Ic \div Ib) - 1] \times Fe \times Fp$$

Where:

PA =Payment Adjustment (may be plus or minus)

Ic =Index for Current Month

Ib =Index for Bidding

Fe =Estimated Fuel in Gallons used based on above table and work paid for during adjustment month.  $[\Sigma \text{ (Pay quantity x Gallons per unit)} = \text{Fe}]$ 

Fp = Fuel Price for Bidding

The Project Engineer will compute the payment adjustment for fuel on work sheets similar to the one attached and will furnish a copy of the calculations upon request to the prime contractor and approved subcontractors.

Upon the expiration of the allocated working time, as set forth in the original contract or as extended by Change Order, payment adjustments for fuel will continue to be made only when the "Index for Current Month" is **less** than the "Index for Bidding" and varies 5% or more.

Payment adjustment, for fuel provided after the expiration of the allocated working time and where the "Index for Current Month" exceeds the "Index for Bidding", will not be made until after the contract records have been approved by Final Records (FR)/Materials & Tests (MT) and a Final Estimate is ready to be processed. Upon contract record approval by FR/MT, fuel payment adjustments shall be calculated for each month where the allocated working time has expired, the "Index for Current Month" exceeds the "Index for Bidding", and the indices vary 5% or more. The calculation of the fuel payment adjustment shall be made using the "Index for Current Month" or the "Index for Contract Completion Date" in accordance with the following formulas:

The "Index for Contract Completion Date" is the fuel index in effect on the allocated Contract Completion date or the completion date as extended by Change Order.

"Index for Current Month" is **less** than "Index for Contract Completion Date"

$$PA = [(Ic \div Ib) - 1] \times Fe \times Fp$$

"Index for Current Month" is **greater** than "Index for Contract Completion Date"

$$PA = [(Icd \div Ib) - 1] \times Fe \times Fp$$

Where:

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PA = Payment Adjustment (may be plus or minus)

Ic = Index for Current Month

Ib = Index for Bidding

Icd= Index for Contract Completion Date (or as extended by Change Order)

Fe = Estimated Fuel in Gallons used based on above table and work paid for during adjustment month. [∑ (Pay quantity x Gallons per unit)= Fe]

Fp = Fuel Price for Bidding

Payment Adjustment for fuel will be made under:

Item No.	Description	Pay Unit
109-01.01	Payment Adjustment for Fuel	Dollar

# Monthly Payment Adjustment for Fuel Worksheet

Project No.		Contract No			
County			_		
Fuel Price (	Fp)	_Price Index Bid	ding (Ib)	Current Price Index (Ic)	
Index for Co	ontract Co	mpletion Date (or	r as extended by	Change Order) (Icd)	_
Estimate Period: Work PerformedAdjustment Paid (Month/Yr)					
Item	Unit	Quantity	Fuel Factor	r Total Fuel	

<u>Item</u>	Unit	Quantity	Fuel Factor		Total Fuel
			X	=	
			X	=	
			X	=	
			X	=	
			X	=	
			X	=	
			X	=	
			X	=	
			X	=	
			X	=	
			X	=	
			X	=	
			X	=	
			X	=	
				=	

Total Fuel for Month (Fe)

$$PA = [(Ic \div Ib) - 1] \times Fe \times Fp$$

$$PA = [(Icd \div Ib) - 1] \times Fe \times Fp$$

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<u>STATE</u> (Rev. 05-16-16)

(Rev. 04-01-19)

TENNESSEE
January 1, 2015

### **SPECIAL PROVISION**

### REGARDING

# PAYMENT ADJUSTMENT FOR BITUMINOUS MATERIAL

This Special Provision covers the method of payment adjustment for bituminous materials.

# 100% Virgin Bituminous Material

A payment adjustment will be made to compensate for increases and decreases of 5% or more in the contractor's bituminous material cost. The normal bid items in the contract covering the bituminous material shall not be changed. Payment adjustments (+/-) shall be paid under "Payment Adjustment for Bituminous Material" and calculated as described herein:

A "Basic Bituminous Material Index" will be established by the Tennessee Department of Transportation prior to the time the bids are opened. This "Basic Bituminous Material Index" is the average of the current quotations on P.G. 64-22 from suppliers furnishing asphalt cement to contractors in the State of Tennessee. These quotations are the cost per ton f.o.b. supplier's terminal.

The "Basic Bituminous Material Index" for this project is \$530.00 per ton.

The "Monthly Bituminous Material Index" is also established on the first day of each month by the same method. A payment adjustment shall be made provided the "Monthly Bituminous Material Index" varies 5% or more (+/-) from the "Basic Bituminous Material Index".

Where the price index varies 5% or more, the payment adjustment will be made as follows:

 $PA = [Ic - Ib] \times T$ 

Where:

PA = Price Adjustment for Adjustment Month

Ib = Basic Bituminous Material Index Ic = Monthly Bituminous Material Index

T = Tons bituminous material for Adjustment Month

Payment adjustment will be applied to all asphalt cement, asphalt emulsion, or bituminous material used for paying on this project.

Upon the expiration of the allocated working time, as set forth in the original contract or as extended by Change Order, payment adjustments for bituminous material will continue to be made only when the "Monthly Bituminous Material Index" is <u>less</u> than the "Basic Bituminous Material Index" and varies 5% or more.

Payment adjustment, for bituminous material used after the expiration of the allocated working time and where the "Monthly Bituminous Material Index" <u>exceeds</u> the "Basic Bituminous Material Index", will <u>not</u> be made until after the contract records have been approved by Final Records (FR)/Materials & Tests (MT) and a Final Estimate is ready to be processed. Upon contract record approval by FR/MT, payment adjustments for bituminous material shall be calculated for each month where the allocated working time has expired, the "Monthly Bituminous Material Index" <u>exceeds</u> the "Basic Bituminous Material Index", and the indices vary 5% or more. The calculation of the bituminous payment adjustment shall be made using the "Monthly Bituminous Material Index" or the "Bituminous Material Index for Contract Completion Date" in accordance with the following formulas:

The "Bituminous Material Index for Contract Completion Date" is the Monthly Bituminous Material Index in effect on the allocated Contract Completion Date or on the completion date as extended by Change Order.

The "Monthly Bituminous Material Index" is <u>less</u> than the "Bituminous Material Index for Contract Completion Date".

$$PA = [Ic - Ib] \times T$$

The "Monthly Bituminous Material Index" is **greater** than the "Bituminous Material Index for Contract Completion Date".

$$PA = [Icd - Ib] \times T$$

Where:

PA = Price Adjustment for Adjustment Month

Ib = Basic Bituminous Material Index Ic = Monthly Bituminous Material Index

Icd = Bituminous Material Index for Contract Completion Date (or as extended

by Change Order)

T = Tons

#### FOR REFERENCE ONLY

SiteManager calculates the price adjustment based on the actual amount of asphalt cement (residue) in the emulsion using the following percentages:

-tack coats and shoulder sealants (e.g. SS-1, SS-1h, CSS-1, Css-1h)	63% residue
-prime coats (e.g. AE-P)	54% residue
-scrub seals and microsurfacing (e.g. CQS-1HP)	65% residue
-chip seals (e.g. CRS-2, CRS-2P)	69% residue

## **Mixes Containing Recycled Bituminous Material**

The quantity of virgin asphalt cement in tons subject to payment adjustment in recycled mixes shall be the product of the total tons of each mix multiplied by the difference between (1)

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the percent of asphalt cement specified for bidding purposes and (2) the percent of asphalt cement obtained from the recycled asphaltic material (RAP) used in each mix. No payment adjustment under this special provision for increases and decreases in the contractor's cost for virgin asphalt cement in recycled mixes will be allowed for asphalt cement content in excess of the percent specified for bidding purposes, as all payment adjustments for asphalt cement in the mix design of recycled mixes in excess of the percent of asphalt cement specified for bidding purposes will be made in accordance with the Standard Specifications.

No payment adjustment for bituminous material containing RAP shall be made unless the "Monthly Bituminous Material Index" varies 5% or more from the "Basic Bituminous Material Index" indicated in this Special Provision.

Where the price index varies 5% or more, the payment adjustment will be made as follows:

$$PA = [Ic - Ib] \times [BA - RA] \times Tm$$

$$100$$

PA = Price Adjustment for Adjustment Month

Ib = Basic Bituminous Material Index Ic = Monthly Bituminous Material Index

BA = Percent asphalt specified for bidding purposes

RA = Percent asphalt obtained from recycled asphaltic material

used in each mix

Tm = Tons asphalt mix for adjustment month

Upon the expiration of the allocated working time, as set forth in the original contract or as extended by Change Order, payment adjustments for bituminous material containing RAP will continue to be made only when the "Monthly Bituminous Material Index" is <u>less</u> than the "Basic Bituminous Material Index" and varies 5% or more.

Payment adjustment, for bituminous material containing RAP provided after the expiration of the allocated working time and where the "Monthly Bituminous Material Index" exceeds the "Basic Bituminous Material Index", shall not be made until after the contract records have been approved by Final Records (FR)/Materials & Tests (MT) and a Final Estimate is ready to be processed. Upon contract record approval by FR/MT, payment adjustments for bituminous material containing RAP shall be calculated for each month where the allocated working time has expired, the "Monthly Bituminous Material Index" exceeds the "Basic Bituminous Material Index", and the indices vary 5% or more. The calculation of the bituminous payment adjustment shall be made using the "Monthly Bituminous Material Index" or the "Bituminous Material Index for Contract Completion Date" in accordance with the following formulas:

The "Bituminous Material Index for Contract Completion Date" is the Monthly Bituminous Material Index in effect on the allocated Contract Completion Date or on the completion date as extended by Change Order.

The "Monthly Bituminous Material Index" is <u>less</u> than the "Bituminous Material Index for Contract Completion Date".

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$$PA = [Icd - Ib] \times \underline{[BA - RA]} \times Tm$$

$$100$$

The "Monthly Bituminous Material Index" is **greater** than the "Bituminous Material Index for Contract Completion Date".

$$PA = [Ic - Ib] \times \underline{[BA - RA]} \times Tm$$

$$100$$

#### Where:

PA =Price Adjustment for Adjustment Month Ib =Basic Bituminous Material Index Ic = Monthly Bituminous Material Index Icd =Bituminous Material Index for Contract Completion Date (or as extended by Change Order) Percent asphalt specified for bidding purposes BA =RA =Percent asphalt obtained from recycled asphaltic material used in each mix Tons asphalt mix for adjustment month Tm =