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| Use on all projects as needed. |

## Section 109. — MEASUREMENT AND PAYMENT

**109.01 Measurement of Work.** Add the following after the sixth paragraph:

Prepare, sign, and submit electronic measurement notes (pay notes and supporting field documentation) using EEBACS. Measurement notes will be reviewed by the CO. Unacceptable measurement notes will be electronically rejected and returned. Correct rejected measurement notes and resubmit electronically.

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| Use subsection 109.02 on all projects. |

**109.02 Measurement Terms and Definitions.**

**(c)** **Cubic yard (Cubic meter).**

**(1) Cubic yard (Cubic meter) in-place.** Delete this subsection and substitute the following:

Measure the solid volumes by a method approved by the CO, or by a surface to surface method approved by the CO.

**(o) Square foot and Square yard (Square meter)**. Add the following: Do not measure overlaps.

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| **ASPHALT Binder Price Adjustment Provision**  **Before including this SCR on any project coordinate with Acquisitions, Construction, and Materials.**  **Use this price adjustment provision on multiple season contracts/projects when:**  1) The contract involves significant costs incurred beyond one year  2) The contract amount is subject to substantial adjustment  3) Materials and supplies are too unstable to permit reasonable risk between the Government and the Contractor  4) Suppliers are unable to provide price quotations for the usual term of the contract  5) Price quotes are based on the date of delivery or spot market conditions  6) Shortages are expected. |

**109.06 Pricing of Adjustments.** Add the following:

**ASPHALT BINDER Price Adjustment Provision**

**GENERAL** The Asphalt Binder Price Adjustment Provision provides for a price adjustment in the form of payment to the Contractor or a rebate to the Government for fluctuations in the cost of asphalt binder used in the performance of applicable construction work for *(insert the applicable project)*. Price adjustment provisions are applicable only to the asphalt binder, as defined in Section 702.01, and incorporated in the following contract pay items:

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| Edit this list to contain only items that apply to the contract. Be sure to enter the correct bid item number for the work being done. |

* 40101-xxxx Asphalt concrete pavement, gyratory mix
* 40102-xxxx Asphalt concrete pavement, gyratory mix, wedge and leveling course
* 40201-xxxx Asphalt concrete pavement, Hveem or Marshall mix
* 40202-xxxx Asphalt concrete pavement, Hveem or Marshall mix, wedge and leveling course
* 40301-xxxx Asphalt concrete pavement
* 40302-xxxx Asphalt concrete pavement
* 40303-xxxx Asphalt concrete pavement, wedge and leveling course
* 40501-xxxx Open-graded asphalt friction course

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| For each contract pay item from the list above, a corresponding statement should be added to the applicable payment section, which indicates:  “A price adjustment will be made for fluctuations in the cost of asphalt binder used in the performance of applicable construction work according to Subsection 109.06 Pricing of Adjustments Asphalt Binder Price Adjustment Provision.” |

The price adjustment provisions are also applicable to eligible pay items when the Government adds extra work to the Contract.

The provision will remain in effect throughout the duration of the contract. Enactment of the Asphalt Binder Price Adjustment Provision will only be considered when the **increase or decrease** in the price of asphalt binder exceeds 10 percent.

The Asphalt Binder Price Adjustment Provision is intended to reduce but not eliminate the cost effects of price uncertainty to the Contractor and the Government for asphalt binder used in the construction of this contract. It provides for sharing by the Government a portion of the Contractor’s risk, which could result from unusual price fluctuations. The provision is not intended to compensate the Contractor for normal day-to-day fluctuations and seasonal changes or to serve as a guarantee of full compensation for asphalt binder price fluctuations.

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| The Construction Branch is responsible for:  1) purchasing the Asphalt Weekly Monitor (AWM) newsletter  2) selecting the applicable region  3) calculating and posting price indexes on an accessible website  4) calculating and paying price adjustment compensations.  In order to establish a reference for the base and monthly performance price indexes, the Poten and Partners, Inc newsletter (i.e. Asphalt Weekly Monitor) should be surveyed and an applicable region inserted below. A website address must also be inserted below where the Contractor and other interested parties can check Government postings of monthly price indexes. The Base and Monthly Performance Price Indexes for Asphalt Binder must also be calculated using weekly high and low selling price data obtained from the Asphalt Weekly Monitor. Weekly high and low selling price data from four consecutive reports will be averaged to obtain a Base Price Index as well as a Monthly Performance Price Index. **The Construction Branch will calculate and provide the Base Price Index (BPI). The BPI is not inserted during advertisement. It is inserted into the spec by Acqusitions immediately before contract award.** The Monthly Performance Price Index must be posted monthly by Acquistions on the website. |

**PRICE INDEXES** The Government will post a monthly performance price index at: <https://flh.fhwa.dot.gov/business/construction/escalation/cfl/>

Poten and Partners, Inc. (PPI), publishes a weekly report (Asphalt Weekly Monitor) on high and low selling prices for states in five regions throughout the United States including:

* East Coast/Northeast
* Mid-Continent/Midwest
* Gulf Coast/Mid-South
* Rocky Mountains
* West Coast/Northwest

Weekly high and low selling price data reported for *(insert the applicable region)* will be averaged and used to establish a base price index, BPI, for this project and a monthly performance price index, MPPI, for the duration of the contract. These indexes are defined as follows:

* **BASE PRICE INDEX** The base price index, BPI, is the price index posted by the Government as determined by arithmetic average, as specified above, shown in the four weekly publications immediately preceding the contract award. It is as follows:

BASE PRICE INDEX (BPI) FOR ASPHALT BINDER

PER SHORT TON (TON) = $See Note (1) below

Note (1): BPI calculated by the Government and inserted here immediately before contract award.

* **MONTHLY PERFORMANCE PRICE INDEX** The monthly performance price index, MPPI, is the monthly price index at the time of performance of applicable work as determined by arithmetic average, as specified above, shown in the four weekly publications issued prior to the last Wednesday of the month (i.e. the monthly performance price index during which asphalt binder is used in the performance of applicable construction work).

**PRICE ADJUSTMENTS** Price adjustments calculated by the Government are not intended to reflect the Contractor’s actual purchase price. The ratio of the monthly performance price index and the base price index (MPPI/BPI) is calculated and used to determine price adjustments as follows:

* **No Price Adjustment –** when the ratio MPPI/BPI falls within the range of 0.90 to 1.10, no price adjustment will be made for any asphalt binder used in construction work performed during the relevant month.
* **Government Rebate** – When the ratio MPPI/BPI is calculated to be less than 0.90, the Government is due a rebate determined in accordance with the following formula:

Government Rebate = [0.90 – (MPPI/BPI)] (BPI) (Q)

* **Contractor Payment** - When the ratio MPPI/BPI is calculated to be greater than 1.10, the Contractor is due additional payment determined in accordance with the following formula:

Contractor Payment = [(MPPI/BPI) – 1.10] (BPI) (Q)

The following definitions are applicable to both the Government Rebate and the Contractor Payment formulas:

MPPI = Monthly Performance Price Index for the month during which asphalt binder is used in the performance of applicable construction work.

BPI = Base Price Index that is established immediately preceding the bid opening.

Q = Quantity in tons of asphalt binder for each pay item that was used on the project during the progress payment period. The quantity will be calculated using the asphalt content of the approved mix design and the following formula:

Q = Asphalt Concrete Pavement tons placed x (% Asphalt/100)

**PRICE ADJUSTMENT COMPENSATION** Monthly adjustments will be accrued. The final price adjustment will be paid, or rebated, after completion of all work for each eligible pay item. The Contractor may request in writing a partial price adjustment payment once every 12 months, or when the unpaid accrued increase exceeds $10,000. The Government will take a rebate when the deductive accrual exceeds $10,000.

No price adjustments will be made for work performed beyond the Government-approved Contract completion date.

The maximum allowable monthly and final price adjustment to the Contractor or rebate to the Government is limited to a (MPPI/BPI) ratio of 1.6 and 0.4, respectively.

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| **FUeL Price Adjustment Provision**  **Before including this SCR on any project coordinate with Acquisitions, Construction, and Materials.**  **Use this price adjustment provision on multiple season contracts/projects when:**  (1) The contract involves an extended period of performance with significant costs to be incurred beyond one year after performance begins.  (2) The contract amount subject to adjustment is substantial.  (3) The economic variables for materials and supplies are too unstable to permit a reasonable division of risk between the Government and the Contractor.  (4) Suppliers are unable to provide price quotations for the usual term of the contract.  (5) Price quotes are based on the date of delivery or spot market conditions.  (6) Shortages are expected.  The price adjustment provision should only be applied to the specific price of volatile materials and/or supplies called out below. |

**109.06 Pricing of Adjustments** Add the following

**FUeL Price Adjustment Provision**

**GENERAL** The Fuel Price Adjustment Provision contained herein provides for a price adjustment in the form of payment to the Contractor or a rebate to the Government for fluctuations in the cost of diesel fuel consumed in the performance of applicable construction work for *(insert the applicable project)*. The price adjustment provisions are applicable only to contract items listed as eligible pay items in Table 1 below. The price adjustment provisions are also applicable to these eligible pay items when the Government adds extra work to the Contract.

The provision will remain in effect throughout the duration of the contract. Enactment of the Fuel Price Adjustment Provision will only be considered when the **increase or decrease** in the price of diesel fuel as defined herein exceeds 10 percent.

The Fuel Price Adjustment Provision is intended to reduce but not eliminate the cost effects of price uncertainty to the Contractor and the Government for diesel fuel used in the construction of this contract. It provides for sharing by the Government in a portion of the Contractor’s risk, which could result from unusual price fluctuations. The provision is not intended to compensate the Contractor for normal day-to-day fluctuations and seasonal changes or to serve as a guarantee of full compensation for diesel fuel price fluctuations.

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| The Construction Branch is responsible for:  (1) Purchasing the Oil Price Information Service (OPIS) newsletter;  (2) Selecting the applicable rack city.  (3) Calculating, preparing price indexes and sending completed indexes to Acquisitions for posting on the CFLHD website.  (4) Calculating and paying price adjustment compensations. In order to establish a reference for the base and monthly performance price indexes, the Oil Price Information Service (OPIS) newsletter should be surveyed and an applicable rack city inserted below. A website address must also be inserted below where the Contractor and other interested parties can check Government postings of monthly price indexes. The Base and Monthly Performance Price Indexes for Gross Ultra Low Sulfur No. 2 Diesel Fuel must be calculated using weekly average rack price data obtained from OPIS for the applicable rack city. Weekly average rack price data from four consecutive reports will be averaged to obtain a Base Price Index as well as a Monthly Performance Price Index. **The Construction Branch will calculate and provide the Base Price Index (BPI). The Acquisitions will post the BPI on the CFLHD website before contract award.** The Monthly Performance Price Index must be posted monthly by Acquisitions on the website. |

**PRICE INDEXES** The Government will post a monthly performance price index at: <https://flh.fhwa.dot.gov/business/construction/escalation/cfl/>

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| If the project is in California replace “Gross Ultra Low Sulfur, No. 2 Diesel Fuel” below with “Gross CARB Ultra Low Sulfur, No. 2 Diesel Fuel”. |

Gross Ultra Low Sulfur, No. 2 Diesel Fuel using price data obtained from the Oil Price Information Service (OPIS), which publishes a weekly newsletter on the distillate wholsale rack prices for major cities throughout the United States. The OPIS 5-day newsletter average rack price reported for *(insert the applicable rack city)* will be averaged and used to establish a base price index, (BPI), for this project and a monthly performance price index, (MPPI), for the duration of the contract. These indexes are defined as follows:

* **BASE PRICE INDEX** The base price index, BPI, is the price index posted by the Government as determined by arithmetic average, as specified above, shown in the four weekly publications immediately preceding the contract award. It is as follows:

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| If the project is in California replace “Gross Ultra Low Sulfur, No. 2 Diesel Fuel” below with “Gross CARB Ultra Low Sulfur, No. 2 Diesel Fuel”. |

BASE PRICE INDEX (BPI) FOR GROSS ULTRA LOW SULFUR, NO. 2 DIESEL FUEL

PER GALLON = $ See Note (1) below

Note (1): BPI calculated by the Government and inserted here immediately before contract award.

* **MONTHLY PERFORMANCE PRICE INDEX** The monthly performance price index, MPPI, is the monthly price index at the time of performance of applicable work as determined by arithmetic average, as specified above, shown in the four weekly publications issued prior to the last Wednesday of the month (i.e. the monthly performance price index during which diesel fuel is consumed in the performance of applicable construction work).

**PRICE ADJUSTMENTS** Price adjustments are calculated by the Government are not intended to reflect the Contractor’s actual purchase price. The ratio of the monthly performance price index and the base price index (MPPI/BPI) is calculated and used to determine price adjustments for eligible pay items as follows:

* **No Price Adjustment –** when the ratio MPPI/BPI falls within the range of 0.90 to 1.10, no price adjustment will be made for any diesel fuel consumed in construction work performed during the relevant month.
* **Government Rebate** – When the ratio MPPI/BPI is calculated to be less than 0.90, the Government is due a rebate determined in accordance with the following formula:

Government Rebate = [0.90 – (MPPI/BPI)] (BPI) (Q) (FUF)

* **Contractor Payment** - When the ratio MPPI/BPI is calculated to be greater than 1.10, the Contractor is due additional payment determined in accordance with the following formula:

Contractor Payment = [(MPPI/BPI) – 1.10] (BPI) (Q) (FUF)

The following definitions are applicable to both the Government Rebate and the Contractor Payment formulas:

MPPI = Monthly Performance Price Index for the month during which motor diesel fuel is consumed in the performance of applicable construction work.

BPI = Base Price Index that is established immediately preceding the bid opening.

Q = Quantity of work on the project during the progress payment period for eligible pay items shown in Table 1 below. The Government, to agree with the units associated with the applicable Fuel Usage Factor, will convert work quantities, as necessary.

FUF = Fuel Usage Factor shown in Table 1 below applicable to No. 2 diesel fuel.

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| **Table 1 – Eligible Pay Items For Price Adjustments and Associated Fuel Usage Factors** | | |
| **Eligible Pay Items** | **Fuel Usage Factor**  **U.S. Customary Units** | **Fuel Usage Factor**  **Metric Units** |
| **Earthwork:** | | |
| **Section 204 – Excavation and Embankment**  20401 Roadway excavation  20402 Subexcavation  20403 Unclassified borrow  20404 Unclassified borrow\*  20410 Select borrow  20411 Select borrow\*  20415 Select topping  20416 Select topping\*  20419 Embankment construction\*  20420 Embankment construction  20421 Rock excavation | 0.30 gallons per cubic yard | 0.39 gallons per cubic meter |
| **Aggregate and Base Courses:** | | |
| **Section 301 – Untreated Aggregate Courses**  30101 Aggregate base  30102 Aggregate base\*  30103 Aggregate base\*  30105 Subbase  30106 Subbase\*  30107 Subbase\*  30110 Aggregate Surface Course  30111 Aggregate Surface Course\*  30112 Aggregate Surface Course\* | 0.70 gallons per ton | 0.77 gallons per metric ton |
| **Section 305 – Full Depth Reclamation (FDR) with Cement**  30501 FDR with Cement\*  30502 FDR with Cement | 0.30 gallons per square yard | 0.36 gallons per square meter |
| **Section 306 – Full Depth Reclamation (FDR) with Asphalt**  30601 FDR with Emulsified Asphalt\*  30602 FDR with Emulsified Asphalt  30603 FDR with Foamed Asphalt\*  30604 FDR with Foamed Asphalt | 0.30 gallons per square yard | 0.36 gallons per square meter |
| **Section 309 – Emulsified Asphalt Treated Base Course**  30901 Emulsified asphalt treated aggregate base  30902 Emulsified asphalt treated aggregate base\*  30903 Emulsified asphalt treated aggregate base\* | 0.70 gallons per ton | 0.77 gallons per metric ton |
| **Section 310 – Cold In-Place (CIP) Recycled Asphalt Base Course**  31001 CIP Recycled asphalt base\*  31002 CIP Recycled asphalt base | 0.15 gallons per square yard | 0.18 gallons per square meter |
| **Section 311 – Stabilized Aggregate Surface Course**  31101 Stabilized aggregate surface course\*  31102 Stabilized aggregate surface course\*  31103 Stabilized aggregate surface course | 0.70 gallons per ton | 0.77 gallons per metric ton |
| **Asphalt Pavements:** | | |
| **Section 401 – Asphalt Concrete Pavement By Gyratory Mix Design Method**  40101 Asphalt concrete pavement, gyratory mix  40102 Asphalt concrete pavement, gyratory mix, wedge and leveling course | 2.40 gallons per ton | 2.65 gallons per metric ton |
| **Section 402 – Asphalt Concrete Pavement by Hveem or Marshall Mix Design Method**  40201 Asphalt concrete pavement, Hveem or  Marshall mix  40202 Asphalt concrete pavement, Hveem or  Marshall mix, wedge and leveling course | 2.40 gallons per ton | 2.65 gallons per metric ton |
| **Section 403 – Asphalt Concrete**  40301 Asphalt concrete pavement  40302 Asphalt concrete pavement\*  40303 Asphalt concrete pavement, wedge and  leveling course | 2.40 gallons per ton | 2.65 gallons per metric ton |
| **Section 405 – Open-Graded Asphalt Friction Course**  40501 Open-graded asphalt friction course | 2.40 gallons per ton | 2.65 gallons per metric ton |
| **\*** The Government, to agree with the units associated with the applicable Fuel Usage Factor, will convert work quantities, as necessary. | | |

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| For each of the eligible contract pay items chosen above, a corresponding statement should be added to the applicable payment section, which indicates that “A price adjustment will be made for fluctuations in the cost of diesel fuel consumed in the performance of applicable construction work according to Subsection 109.06 Pricing of Adjustments Fuel Price Adjustment Provision.” |

**PRICE ADJUSTMENT COMPENSATION** Monthly adjustments will be accrued. The final price adjustment will be paid, or rebated, after completion of all work for eligible pay items. The Contractor may request in writing a partial price adjustment payment once every 12 months, or when the unpaid accrued increase exceed $10,000. The Government will take a rebate when the deductive accrual exceeds $10,000.

No price adjustments will be made for work performed beyond the Government-approved Contract completion date.

The maximum allowable monthly and final price adjustment to the Contractor or rebate to the Government is limited to a (MPPI/BPI) ratio of 1.6 and 0.4, respectively.

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| Use on all projects. |

**109.08 Progress Payments.**

**(a) General.** Delete the last sentence and substitute the following:

The CO may withhold partial progress payment according to Subsection 109.08 (g) for failure to make satisfactory progress until a construction schedule or schedule update is approved by the CO.

**(b) Closing date and invoice submittal date.** Delete the text and substitute the following:

Submit invoices to the designated billing office by the 7th day after the closing date. Invoices received by the designated billing office after the 16th day following the closing date will not be accepted for payment processing that month. Include late, unprocessed invoice submittals in the following months invoice.

**(d) Government’s receiving report.** Delete the first sentence and substitute the following:

The Government’s receiving report will be developed using the measurements and quantities from Pay Notes received by the CO in EEBACS and determined acceptable.

**(e) Processing progress payment requests.**

**(1) Proper invoices.** Delete the title and text and substitute the following:

**(1) Invoices received by the 7th day following the closing date.**

*(a) Proper invoices.* If the invoice meets the requirements of Subsection 109.08(c), and the quantities and unit prices shown on the Contractor's invoice agree with the corresponding quantities and unit prices shown on the Government's receiving report, the invoice will be paid.

*(b) Defective invoices.* If the invoice does not meet the requirements of Subsection 109.08(c), or if any of the quantities or unit prices shown on the Contractor's invoice exceed the corresponding quantities and unit prices shown on the Government's receiving report, the invoice will be deemed defective and the Contractor so notified according to FAR Clause 52.232-27(a)(2). Defective invoices will not be corrected by the Government and will be returned to the Contractor within 7 days after the Government's designated billing office receives the invoice.

Revise and resubmit returned invoices by the 18th day following the closing date. The CO will evaluate the revised invoice. If the invoice still does not meet the requirements of Subsection 109.08(c), the Contractor will be so notified according to FAR Clause 52.232-27(a)(2), and no progress payment will be made that month. Correct the deficiencies and resubmit the invoice the following month.

If the revised invoice meets the requirements of Subsection 109.08(c), but still had quantities or unit prices exceeding the corresponding quantities and unit prices shown on the Government's receiving report, the Government's data for that item or work will be used. The Contractor's invoice, as revised by the Government's receiving report, will be forwarded for processing by the 23rd day following the closing date. The Contractor will be notified by the 23rd day following the closing date of the reasons for any changes to the invoice.

**(2) Defective invoices.** Delete the title and text and substitute the following:

**(2) Invoices received between the 8th and 16th day following the closing date.**

*(a) Proper invoices.* If the invoice meets the requirements of Subsection 109.08(c), and the quantities and unit prices shown on the Contractor's invoice agree with the corresponding quantities and unit prices shown on the CO's receiving report, the invoice will be deemed proper and forwarded for processing within 7 days of receipt.

*(b) Defective invoices.* If the invoice does not meet the requirements of Subsection 109.08(c), the invoice will be deemed defective, the Contractor so notified according to FAR Clause 52.232-27(a)(2), and no progress payment will be made that month. Correct the deficiencies and resubmit the invoice the following month.

If the invoice meets the requirements of Subsection 109.08(c), but has quantities or unit prices exceeding the corresponding quantities and unit prices shown on the Government's receiving report, the Government's data for that item of work will be used. The Contractor's invoice, as revised by the Government's receiving report, will be forwarded for processing within 7 days of the Government's receipt of the invoice. The Contractor will be notified of the reasons for any changes to the invoice.

**(f) Partial payments.** Delete the subsection and substitute the following:

**(f) Partial payments.** Progress payments may include partial payment for material to be incorporated in the work according to FAR Clause 52.232-5(b)(2), provided the material meets the requirements of the contract and is delivered on, or in the vicinity of, the project site or stored in acceptable storage places.

Partial payments for stockpiled manufactured material (aggregates) will be based on Contractor process control test results. If test results show the material to be out-of-specification, or in “reject” where statistical evaluation procedures are used, no payment for stockpiled materials will be made.

Partial payment for material does not constitute acceptance of such material for use in completing items of work. Partial payments will not be made for living or perishable material until incorporated into the project.

Individual and cumulative partial payments for preparatory work and material will not exceed the lesser of:

**(1)** 80 percent of the contract bid price for the item; or

**(2)** 100 percent of amount supported by copies of invoices submitted.

The quantity paid will not exceed the corresponding quantity estimated in the contract. The CO may adjust partial payments as necessary to protect the Government.