# Baystate Roads Program Local Technical Assistance Program (LTAP)

## **Tech Notes**

### **PRICE ADJUSTMENTS**

Tech Note #55

Municipalities are urged to insert an escalator clause into their paving and materials contracts but are advised to proceed with caution. An escalator clause allows pricing for asphalt materials to adjust up or down depending on the market value. By using the escalator clause, cities and towns typically receive more competitive bids from the asphalt industry since providers do not feel locked in at a flat unit price. Adding adjustment language can potentially save money because contractors may not consider bidding or will bid high without one. The volatility of the cost of raw materials has created a need for protection for both parties. Obviously, if the price of the raw product goes up, a municipality with an escalator clause will pay more, but if the price goes down it will pay less.

Hot mix asphalt concrete (hot mix) is made of stone, sand, and an asphalt cement binder, which is the glue that binds the aggregate together. The price adjustment is required only for the asphalt cement portion of the mixture as the price of this ingredient is the most volatile. In order to determine how much asphalt cement is in a ton of hot mix, a liquid asphalt content (by weight) factor is used (a typical ton of hot mix will contain about 110 lbs. of asphalt cement). When you know how many tons of liquid asphalt cement were used in the project, what the price per ton of asphalt cement was when the contractor bid the project, and what the price per ton of asphalt cement was when the work was done; it is possible to mathematically adjust the payment for the work thus removing the risk of price fluctuations. An example equation is contained at the end of the article.

In accordance with Chapter 303 of the Acts of 2008, MassDOT uses special provisions on selected projects to make contract adjustments for prices at the time work is performed. Municipalities are required to include price



adjustment clauses in their contracts funded by Chapter 90 money. These include price adjustments for hot mix asphalt mixtures, Portland Cement concrete, diesel fuel, gasoline, and structural and reinforcing steel. Prices may be adjusted based on the difference between the base price and period price. However, a price adjustment is required on all Chapter 90 funded projects in accordance with the MassDOT guidelines posted on:

http://www.mhd.state.ma.us

Click on "Doing Business with MassDOT", then "Price Adjustments" under "Approved Materials". Adjustments also apply to other state agencies listed in the statute. The base price is listed in the "Notice to Contractors" section of the bid documents. The language for this information is available on the Baystate Roads Program's website: www.baystateroads.org.

As an example, price adjustments for hot mix asphalt mixtures containing asphalt cement can provide a base price and period price in the "Notice to Contractors." The base price is a fixed price determined by MassDOT. The price adjustment will be based on the variance in price for the asphalt cement component only from the base to the period price but will not include transportation of the material. MassDOT has now changed to one month period adjustments and posts the period price on its website (www.mhd.state.ma.us) using the av-

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erage selling price per standard ton of PG64-28 paving grade asphalt, FOB manufacturer's terminal, as listed under the "East Coast Market - New England, Boston, Massachusetts area" section of the Poten & Partners, Inc. *Asphalt Weekly Monitor.* This average selling price is listed in the issue having a publication date of the second Friday of the month and will be posted as the period price for that month.

The contract price of the hot mix asphalt mixture will be paid under the respective item in the contract. This adjustment (upwards or downwards) will be made as work is performed, using the most recent previous price adjustment until the applicable period price is established.

The price adjustment shall be a separate item and will be determined by multiplying the number of tons of hot mix asphalt mixture placed during each monthly period times the liquid asphalt content percentage times the variance in price between base and period price of liquid asphalt. MassDOT states that "this adjustment will be paid only if the variance from the base price is 5% or more for a monthly period. The complete adjustment



will be paid in all cases with no deduction of the 5% from either upward or downward adjustments."

Time extensions on contracts must be approved in writing by the municipality or MassDOT.

If a town decides to use an escalator clause, it must be inserted into the bid documents and all prospective bidders must have the same opportunity to submit a

bid with the escalator/de-escalator included. Keep in mind that only the municipality or MassDOT may initiate the escalator clause provision; the contractor may not insert it.

#### THANKS TO THE FOLLOWING CONTRIBUTORS

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# EXAMPLE OF A PROJECT WHERE THE PRICE OF LIQUID ASPHALT CEMENT GOES FROM \$394 PER TON to \$525 PER TON

 Job
 Tons HMA
 LA %
 AC base
 AC esc
 V
 Adjustment

 Saab St.
 1000
 5.50%
 \$394.00
 \$525.00
 \$131.00
 \$7,205.00

# EXAMPLE OF A PROJECT WHERE THE PRICE OF LIQUID ASPHALT CEMENT GOES FROM \$394 PER TON to \$325 PER TON

 Job
 Tons HMA
 LA %
 AC base
 AC esc
 V
 Adjustment

 Jetta Lane
 1000
 5.50%
 \$394.00
 \$325.00
 \$(69.00)
 \$(3,795.00)

**Tons HMA**= Tons of Hot Mix Asphalt Concrete Mixture such as "top" or "binder"

LA %= Percentage, by weight, of liquid asphalt cement in the HMA (from job mix formula)

AC base= The price of liquid asphalt cement at the time of the bid
AC esc= The price of liquid asphalt cement when the work was done

V= The difference between the base price and the price when the work was done

Adjustment= The amount the payment is increased or reduced to compensate for change to the price of

liquid asphalt cement

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