

SECTION 220 – ULTRATHIN BONDED ASPHALT SURFACE

1. GENERAL

The work shall consist of the application of ultrathin bonded asphalt surface (UBAS) material to an existing street surface in accordance with the latest version of Section 613 of the Kansas Department of Transportation Standard Specifications (KDOT) and as herein.

2. MATERIALS

A. Asphalt Binder. Asphalt Binder shall be Grade PG 70-28 asphalt cement as specified in the latest version of Section 1202 of the Standard Specifications. Material shall be sampled and sealed at the refinery or other point of loading, and an approved testing laboratory shall test samples. All sampling and testing shall be conducted in accordance with the applicable AASHTO or ASTM test method. Acceptance will be based on certified test reports, and copies of such reports shall be furnished for each shipment. Contractor shall arrange and pay for all testing, and shipment of materials shall be scheduled to permit sampling and testing in advance of time materials will be required on the work.

Provide Emulsion Bonding Liquid (EBL) that complies with Section 1200 of the Standard Specifications.

B. Reclaimed Asphalt Pavement (RAP) and Recycled Asphalt Shingles (RAS). Do not use RAP or RAS in the UBAS.

C. Aggregates. Provide aggregates that comply with Section 1103 of the Standard Specifications.

D. Combined Aggregates. Provide combined aggregates for Type B mix designation as shown in Table 613-1 of Section 613 of the Standard Specifications.

3. SURFACE PREPARATION

Clean the surface to remove all foreign material and broom to remove dust. Apply bituminous tack coat. Material shall be Type SS-1H anionic or CSS-1H cationic asphalt emulsion as specified in Section 1203 of the KDOT Standard Specifications. Material shall be sampled and tested by an approved testing laboratory at the expense of the Contractor, as specified in Section 1203. Acceptance will be based on certified test results. Equipment and construction requirements shall conform to Section 606 of the Standard Specifications. Rate of application as directed by the Engineer shall be between 0.08 and 0.12 gallons per square yard.

4. MAINTENANCE OF TRAFFIC

Closing of streets for this work shall be at the direction of the Engineer and coordinated to result in the least practicable delay and inconvenience to traffic. Unless otherwise directed, all roads shall have one lane of traffic open in each direction at all times. The lanes being sealed shall be closed and guarded until cured out and open to traffic. Sufficient flagmen, warning signs and barricades shall be provided by the Contractor to properly control traffic and to prevent traffic from traveling in the freshly applied materials. Barricades and barricading, signs and other warning devices will be in accordance with the Federal Highway Administration "Manual on

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Uniform Traffic Control Devices" provisions for "Traffic Controls for Street and Highway Construction and Maintenance Operations."

Streets shall not be closed to traffic on the street's regularly scheduled sanitation collection day. A map showing the sanitation collection schedule appears at the end of this section.

5. CURING

Adequate means shall be provided to protect the UBAS from damage by traffic until the mixture has cured sufficiently so that it will not adhere to or be picked up by the tires of vehicles. The Contractor shall provide signs, barricades and flagmen necessary to control traffic around the area under construction. The Contractor shall repair any damage done by traffic to the UBAS at no expense to the City.

6. YIELDS

Rates of application shall be as designated in the Summary of Quantities or as directed by the Engineer. The Engineer shall approve the mix design and all UBAS materials and methods prior to use.

7. WEATHER LIMITATIONS

Do not place UBAS on any wet or frozen surface or when weather conditions prevent the proper handling and finishing of the mixture. Only place UBAS when either the ambient air temperature is 50 degrees Fahrenheit or the minimum road surface temperature is 55 degrees Fahrenheit.

8. MEASUREMENT AND PAYMENT

Measurement shall be made based on dry tonnage of combined UBAS materials delivered and placed in accordance with specifications. Delivery tickets shall be required as documentation for payment. Payment for this work shall be made at the contract unit price per ton for UBAS at the locations as shown in the plans. Tack coat shall be at no direct payment.