

OIL BITUMINOUS MAT.

A TRAVELING PLANT MIX, OR A STATIONARY PLANT MIX TO BE USED.

KANSAS STATE STANDARD SPECIFICATIONS for construction of Bituminous Mat Surface Revised as of 1932, to govern (except Specifications for Oils) with the provision that twenty five (25%) per cent of the Mineral Aggregate may be clean river sand, and seventy-five (75%) Per cent to be clean limestone; but, after the aggregates are mixed they shall conform to the Screen Tests as provided in Kansas State Standard Specifications.

NOTE: Two (2%) Per Cent moisture on materials, maximum.

OILS to be used shall meet the following specifications:

GRADE "B" - PENETRATION:- A road oil for light surface treatment on earth, sand-clay and gravel surfaces. That does not require heating for proper application. That requires a light application of mineral cover when used for surface treatment. For use as a primer preceding the application of a mat surface.

Flash Point, °F, min.....	200
Viscosity, Saybolt Furol at 122 ° F (secs) Mx. ....	225
Loss on heating, % max. ....	12
Asphaltic residue of 100 penetration, % min. ....	55
Ductility of residue at 77° F (25°C.) cm., min.....	50
Soluble in carbon tetrachloride, % not less than .....	99
Water, % max. ....	0.5

GRADE "E" - MIX:- Road oils for building up a heavy mat surface on earth, sand-clay and gravel surfaces by stationary plant mixing and optional for traveling plant mixing.

Flash Point, °F, min. ....	220
Viscosity, Saybolt Furol at 122°F (secs.) max. ....	800
Loss on heating, % max. ....	8
Asphaltic residue of 100 penetration, % min. ....	75
Ductility of residue at 77° F (25° C.) cm., min. ....	50
Soluble in carbon tetrachloride, % not less than .....	99
Water, % max. ....	0.5

SCREEN TEST.

The gradation for the mineral aggregates immediately prior to the mixing with oil shall be such that the final product will meet the following requirements as to gradation:

Passing 1 inch mesh sieve .....	100%
Retained on 3/8 mesh sieve, not less than .....	5%
Retained on 8 mesh sieve. ....	25% to 50%
Retained on 28 mesh sieve, not more than .....	75%
Retained on 100 Mesh sieve, not more than .....	85%
Passing 200 mesh sieve, from .....	12% to 20%

NOTE: When the mineral filler can be definitely controlled, as in a stationary mixing plant, 8% to 15% of the total mineral aggregate shall pass a 200 mesh sieve.

CONSTRUCTION METHODS.

WORK PERFORMED BY CONTRACTOR: The following work shall be performed by the Contractor and shall be a part of the contract:

- (1) The preliminary preparation of the subgrade.
- (2) The removal of unsuitable or addition of suitable subgrade material.
- (3) The windrowing of existing suitable material.
- (4) The addition of all necessary mineral filler on road mix or traveling plant mix jobs when roadside mineral filler is specified.

NOTE: The payment for above work to be absorbed in the Contractor's Station Manipulation Bid.

JOB NO.1.  
PROPOSAL FOR CONSTRUCTION OF BITUMINOUS MAT SURFACE ON FOUR (4) MILES OF MEMORIAL DRIVE FROM ELEVENTH STREET TO FIFTY FIRST STREET, BEING MILES 2-3-4-5 OF SECTION "K-1"

APPROXIMATE QUANTITIES.

UNIT ITEMS:

33,792 Gallons Grade "B" Oil based on an estimate of 0.8 gal. per Sq.Yd. on Penetration. Includes cost of Oil and application.	@ 0.032 Per Gal	\$ 1,081.38
56,000 Gallons Grade "E" Oil based on an estimate of 14,000 gal. per mile on Mix, See Paragraph 5.0 "Method of Measurement". See Paragraph 6.0 "Basis of Payment".	@ 0.032 Per Gal	\$ 1,792.00
2,852 Tons Aggregate in Place based on an estimate of 10 C Y o per station.	@ \$1.65 Per Ton	\$ 4,705.80
Station Manipulation 211.2 - 200 Ft. Stations (52.8 Stations per Mile)	@ \$10.25 Per Sta.	2,164.80
TOTAL JOB NO. 1.		\$ 9,744.00