# STATE OF NEBRASKA DEPARTMENT OF ROADS ADDENDUM NO. 2 PROJECT NO. PM-D4(1006) CONTROL NO. 49903C CALL ORDER N09 VARIOUS LOCATIONS IN THE ORD AREA LETTING DATE: MAY 23, 2002

The Special Provisions are amended to include the following:

## FOG SEAL EMULSION

# Requirements

- a. The emulsified asphalt Supplier shall have a minimum of 5 years experience producing this type of emulsified asphalt.
- b. The emulsified asphalt must contain a minimum of 18 percent Gilsonite.
- c. The emulsified asphalt must not contain tall oil pitch.

# Specifications for Emulsified Asphalt Concentrate

Saybolt Viscosity at 77°F (25°C) ASTM D-2442	0 to 100 seconds
Residue by Distillation, or Evaporation	57% min.
Sieve test ASTM D-244 (two tenths of one %)	0.2%
5 day Settlement test ASTM D-244	
Particle charge (1) ASTM D-244	Positive

### Specifications for Diluted Emulsified Asphalt

Saybolt Viscosity at 77°F (25°C) ASTM D-244	10 to 50 sec.
Residue by Distillation, or Evaporation	28% to 42%
Pumping Stability test (2)	Pass

### Tests on Residue from Distillation, or Evaporation:

Viscosity at 275°F (135°C) ASTM D-4402	1750 cps max.
Solubility in 1, 1, 1, trichloroethylene ASTM D-2042	97.5% min.
Penetration ASTM D-5	50 dmm max.
Asphaltenes ASTM D-2007	15% min.
Saturates ASTM D-2007	15% max.
Polar Compounds ASTM D-2007	25% min.
Aromatics ASTM D-2007	15% min.

- (1) pH may be used in lieu of the particle charge test which is sometimes inconclusive in slow setting, bituminous emulsions.
- (2) Pumping stability is tested by pumping 1 pint, (475 ml) of diluted emulsified asphalt (1 part concentrate to 1 part water), at 77°F (25°C), through a ¼ inch gear pump operating at 1750 rpm for 10 minutes with no significant separation or coagulation.

**DEPARTMENT OF ROADS** 

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Issued: May 10, 2002 CO:DB:N09AD205

NOTICE: Only the contractors issued bidding proposals receive this addendum and responsibility for notifying any potential subcontractors or suppliers remains with the contractor.