ITEM SPECIAL - EPOXY PAVEMENT MARKINGS (Continued)

G. CERTIFICATION OF COMPLIANCE:

The material manufacturer shall furnish a notarized certification that the material complies with the provisions of this specification. It shall not be inferred that the provisions of a certification of compliance waives state inspection, sampling or testing.

H. LABORATORY SAMPLES:

Promptly after execution of the contract, the contractor shall notify the Engineer of the sources of material he expects to use. The material manufacturer shall furnish samples of the epoxy materials as may be required by the Engineer, a minimum of ten days before the date of intended use of these materials.

I. INFRARED SPECTRA:

A copy of the infrared spectra of each component on each lot number shall be supplied by the manufacturer along with the certification papers. This infrared spectra will be on record with the department to serve as a quality control measure for the future supply of this system to the state.

J. QUALIFYING A MANUFACTURER:

The manufacturer must have expertise reinforced with history in this particular field to qualify, such as:

1. Completed and passed the service test in accordance with Supplemental Specification 1047.
2. Verifiable installations
3. Ample production capacity
4. Proper facility
5. Compliance with EPA regulations
6. A verifiable quality control program.

K. QUALIFYING A CONTRACTOR:

In order for an installer of such pavement marking material to be approved, he must submit a certificate from a pre-approved manufacturer of such epoxy pavement marking materials, certifying that such a contractor has functional, appropriate equipment to install the epoxy pavement marking material stated with the technology in this specification and he has and continues to be successful at performing this type of work.

L. PERFORMANCE REQUIREMENTS:

The system shall provide effective delineation on concrete as well as asphalt pavement for the specified period and provide the following initial retroreflectivity requirements, as measured with a Mirolux-12:

	Specific Luminance (millicandelas/square foot/foot candle)
White Lines, Symbols, and Legends	250 min.
Yellow Line	175 min.

M. METHOD OF MEASUREMENT:

In addition to the requirements of Section 641.12, the following shall apply:

1. The contractor must submit certified documents from the manufacturer of the amount of gallons and pounds of beads shipped for a particular project.
2. In the field, the contractor shall furnish a calibrated measuring device to be used to measure the quantity of materials used such as stroke counters mounted on the dispensing pumps. Stroke counter readings must be taken at the beginning and end of each day by the state authorized inspector. Caution must be taken while re-circulating the material to turn off the stroke counter on the pump. (Using the "dipping the tank" method as the only measure is not sufficient.)
3. The rate of application of materials shall be verified by comparing the amount of material used with the computed amount needed for each section.

   Where short sections are involved and it is not practical or feasible to determine the quantities used on each and every short section, such sections may, by agreement between the Engineer and contractor, be grouped together to verify the quantities used.

N. DEDUCTION FOR DEFICIENCY:

In lieu of the requirements of Section 641.11, the following shall apply:

The amount of marking material (including Part A, Part B, Size I glass beads and Size II glass beads) applied per unit of measurement will be computed each day by the Engineer. The following tolerances shall be used for purposes of adjusting the unit price for each item:

A tolerance of 5 percent for deficiency of marking material (Part A, Part B, Size I Glass Beads, and Size II Glass Beads) shall be permissible without deductions. If calculations reveal that the 5 percent tolerance has been exceeded, and an insufficient amount of material has been applied, the contract unit price shall be reduced in the following manner:

For a deficiency greater than 5 percent, but less than or equal to 12.5 percent, payment will be based on 90 percent of the contract unit price.

For a deficiency greater than 12.5 percent, but less than 20 percent, payment will be based on 80 percent of the contract unit price.

If the deficiency for any material is 20 percent or more, the work shall be considered unsatisfactory and shall be replaced at the expense of the contractor, including all labor, equipment, traffic control, and material requirements. The re-application shall be applied over the existing binder with the proper surface preparation as stated in 641.05.

If the deficiency exceeds 50 percent, the material shall be applied at the rates stated under INSTALLATION above. If the deficiency is between 20 and 50 percent, the rates of re-application of Parts A & B shall be at one half the rates stated under INSTALLATION above. In either case, the glass beads shall be applied at 25 pounds of glass beads per gallon of epoxy material applied.

O. FINAL ACCEPTANCE:

Pavement markings which are unacceptable, or become unacceptable prior to final acceptance, as determined by the Engineer, for causes such as, but not limited to, improper application, loss of adhesion to the pavement, non-uniform retroreflectivity, or non-retroreflectivity, shall be replaced by the Contractor with markings conforming to these specifications and requirements at his expense without delay, or the Contractor may request that the work be considered non-performed. The Contractor will receive no payment for unacceptable work which is considered non-performed.

P. BASIS OF PAYMENT:

All work performed and measured as described above will be paid at the contract unit price bid (subject to adjustment for deficiency) for the following items:

ITEM	DESCRIPTION	UNIT
SPECIAL	Pavement Marking, Misc.: Lane Line	KM
SPECIAL	Pavement Marking, Misc.: Center Line	KM
SPECIAL	Pavement Marking, Misc.: Channelizing Line	METER
SPECIAL	Pavement Marking, Misc.: Stop Line	METER
SPECIAL	Pavement Marking, Misc.: Crosswalk Line	METER
SPECIAL	Pavement Marking, Misc.: Transverse Line	METER
SPECIAL	Pavement Marking, Misc.: Curb Marking	METER
SPECIAL	Pavement Marking, Misc.: Dotted Line, __ Inch	METER
SPECIAL	Pavement Marking, Misc.: Island Marking	SQ METER
SPECIAL	Pavement Marking, Misc.: Word On Pavement, 72 Inch	EACH
SPECIAL	Pavement Marking, Misc.: Lane Arrow	EACH

metric units

CALCULATED

CHECKED

GENERAL NOTES

LAK-20-28.014

PLOTTED BY:coop2
PLOTTED FROM:users@ilorincz@pid16981@16981gnd.dgn
16981gnd.dgn
PLOT SUBMITTED:05-FEB-1998 09:27