Attachment 1

THERMOPLASTIC PAVEMENT MARKINGS

PART 1- GENERAL

1.1 DESCRIPTION OF WORK

Furnish all labor, materials and equipment necessary to provide thermoplastic pavement markings on previously constructed pavement and as specified herein.

1.2 GENERAL REQUIREMENTS

The Dept. of Transportation, Highways Division "Hawaii Standard Specifications for Road, Bridge and Public Works Construction", 2005, including all revisions, shall govern all work except for subsections on Measurement and Payment which shall not be applicable. This publication shall be referred to as State D.O.T. Standard Specifications hereinafter.

PART 2- PRODUCTS

2.1 MATERIALS

A. Thermoplastic Tape shall conform to the Hawaii Standard Specifications for Road, Bridge and Public Works Construction, latest edition, Section 755.05. Retro-reflective Thermoplastic Compound Pavement Markings.

B. Thermoplastic Pavement Markings shall include but not limited to striping, arrows, letters, and numbers.

PART 3 - EXECUTION

3.1 APPLICATION

A. Compound shall be machine-applied to pavement surface in molten state at temperature range of 4.1255 ± 12.5 degrees F. Material shall not scorch or discolor if kept at molten state temperatures for up to 4 hours.

B After cooling to ambient temperature and without polymerization or other chemical change, compound shall form traffic marking stripe of quality and appearance as specified herein.

C. Material shall show no appreciable deformation or discoloration under local traffic conditions and in ambient or pavement temperatures ranging from 0 degrees F to 120 degrees F.

D. Drying time is defined as minimum elapsed time from marking application to time after which normal local traffic leaves no impression or imprint on applied marking, and after which stripe attains and retains required characteristics, including thickness.

When applied at temperature range of 412.5 ± 12.5 degrees F and thickness of 1/8 inch to 3/16 inch, material drying time shall not exceed two minutes when the air temperature is 50 ± 3 degrees F. When air temperature is 90 ± 3 degrees F, drying time shall not exceed 10 minutes.

E. Material shall allow stripe to maintain original dimensions and placement. Exposed surface shall be free from tack. Applied marking shall not chip or debond under normal movement of pavement surface.

F. Pigment shall be dispersed evenly throughout material. Materials shall be of uniform density and character, throughout its thickness.

G. Material shall not smear or spread at pavement temperatures of 140 degrees F or less.

2.2 PROTECTION OF WORK

New markings shall be protected from damage by vehicles during the time required for paint to harden sufficiently to withstand traffic. During periods of high winds, painting will be discontinued. Any damage to new markings due to Contractor's failure to provide adequate protection will be repaired by Contractor.