

SECTION 32 17 23 – PAVEMENT MARKINGS**PART 1 GENERAL**

1.01 SUMMARY

- A. Section Includes:
 - 1. Traffic lines and markings.
 - 2. Symbols and Legends.
 - 3. Paint.
- B. Related Requirements:
 - 1. Section 32 12 00 – Flexible Paving
 - 2. Section 32 16 00 – Curbs and Sidewalks

1.02 REFERENCES

- A. Pennsylvania Department of Transportation (PENNDOT):
 - 1. Publication 408 – Standard Specifications
 - 2. Bulletin 15 - Qualified Products List for Construction.

1.03 SUBMITTALS

- A. Submit under provisions of Section 01 33 00 – Submittal Procedures.
- B. Product Data: Submit paint formulation for each type of paint or marking material.
- C. Manufacturer's Instructions: Submit instructions for application temperatures, eradication requirements, application rate, line thickness, and any other data on proper installation.

1.04 DELIVERY, STORAGE AND HANDLING

- A. Deliver materials to project site in original packages with seals unbroken and bearing manufacturer's labels containing brand name and type of material, date of manufacture, and directions for storage.
- B. Store materials in a clean, dry, protected location within temperature range required by manufacturer. Protect stored materials from direct sunlight.

1.05 AMBIENT CONDITIONS

- A. Do not apply materials when surface and ambient temperatures are below temperature of 50°F and above a maximum relative humidity of 80%.
- B. Do not apply materials during rain or snow, or moisture content of surfaces exceed those required by paint product manufacturer.

PART 2 PRODUCTS**2.01 PAINTED PAVEMENT MARKINGS**

- A. Provide materials from a source listed in PennDOT Bulletin 15, Qualified Products List for Construction.
- B. Pavement-Marking Paint: Latex, waterborne emulsion, lead and chromate free, ready mixed, complying with FS TT-P-1952, Type II, with drying time of less than three minutes.
 - 1. Colors: Yellow, White and Blue
- C. Glass Beads: AASHTO M 247, Type 1 made of 100 percent recycled glass].
 - 1. Roundness: Minimum 80 percent true spheres by weight.

2.02 EQUIPMENT

- A. Commercial compressed air or airless spray striping machine capable of applying an even coating at the paint manufacturer's recommended thickness in an even width across the marking.
- B. Do not use hand brushes or rollers

PART 3 EXECUTION**3.01 PREPARATION**

- A. Verify that pavement is dry and in suitable condition to begin pavement marking according to manufacturer's written instructions. Allow paving to age for a minimum of 7 days before starting pavement marking.
- B. Maintenance and Protection of Traffic:
 - 1. Prevent interference with marking operations and to prevent traffic on newly applied markings before markings dry.
- C. Surface Preparation.
 - 1. Clean and dry paved surface prior to painting.
 - 2. Blow or sweep surface free of dirt, debris, oil, grease or gasoline.
 - 3. Spot location of final pavement markings as specified and as indicated on drawings.

3.02 APPLICATION

- A. Apply markings to indicated dimensions at indicated locations.
- B. Apply paint with mechanical equipment to produce pavement markings, of dimensions indicated, with uniform, straight edges. Apply at manufacturer's recommended rates to provide a minimum wet film thickness of 15 mils.
 - 1. Apply graphic symbols and lettering with paint-resistant, die-cut stencils, firmly

secured to pavement. Mask an extended area beyond edges of each stencil to prevent paint application beyond the stencil. Apply paint so that it cannot run beneath the stencil.

2. Broadcast glass beads uniformly into wet markings at a rate of 7 lb/gal.
- C. Prevent splattering and over spray when applying markings.
- D. Protect painted pavement markings from vehicular and pedestrian traffic until paint is dry and track free. Follow manufacturer's recommendations or use minimum of 30 minutes.
- E. Collect and legally dispose of residues from painting operations.

3.03 FIELD QUALITY CONTROL

- A. Inspect for incorrect location, insufficient thickness, line width, coverage, retention, uncured or discolored material, and insufficient bonding.
- B. Repair lines and markings, which after application and curing do not meet following criteria:
 1. Incorrect Location: Remove and replace incorrectly placed patterns.
 2. Insufficient Thickness, Line Width, Paint Coverage: Prepare defective material by acceptably grinding or blast cleaning to roughen marking surface. Remove loose particles and debris. Apply new markings on cleaned surface in accordance with this Section.
 3. Uncured or Discolored Material, Insufficient Bonding: Remove defective markings and clean pavement surface one foot beyond affected area. Apply new markings on cleaned surface in accordance with this Section.
- C. When eradication of existing paint lines is necessary, eradicate by shot blast or water blast method. Do not gouge or groove pavement more than 1/16 inch during removal. Limit area of removal to area of marking plus 1 inch on all sides. Prevent damage to transverse and longitudinal joint sealers, and repair any damage according to requirements specified elsewhere.

END OF SECTION