

## **ITEM 0 GENERAL**

### **0.1 INTENT**

The intent is to specify materials, equipment, methods, and standards to be used for the construction of pavement systems as indicated on the plans. The design intent is to construct a pavement with adequate thickness and quality to provide a serviceable life of at least 20 years. All workmanship and materials shall be in accordance with the requirements of these specifications and special provisions, and in conformity with the lines, grades, quantities and typical cross sections shown on the plans or as directed by the **AGENCY**.

### **0.2 DEFINITIONS**

- AASHTO shall refer to the American Association of State Highway and Transportation Officials
- ACI shall refer to the American Concrete Institute
- AGENCY shall refer to the person or persons representing a city or county government
- ASTM shall refer to the American Society for Testing and Materials
- CDOT shall refer to the Colorado Department of Transportation
- **CONTRACTOR** shall refer to the individual, firm, corporation or any acceptable combination thereof, or joint venture contracting for the performance of prescribed work
- FHWA shall refer to the Federal Highway Administration
- LabCAT shall refer to the Laboratory for Certification of Asphalt Technicians, a part of Colorado Asphalt Producers Association (CAPA) and in partnership with CDOT & FHWA
- MGPEC shall refer to the Metropolitan Government Pavement Engineers Council

### **0.3 INCORPORATED BY REFERENCE**

In the event that work required by the plans is not covered within these specifications, the most recent version of the CDOT Standard Specifications for Road and Bridge Construction and special provisions of the contract documents shall govern the work.

The following references, latest version, are incorporated by reference:

- Uniform Manual of Traffic Control Devices
- CDOT Field Materials Manual ("CP-##" Procedures)
- CDOT Laboratory Manual of Test Procedures ("CP-L ####" Procedures)
- Asphalt Institute MS-2, "Mix Design Methods for Asphalt Concrete"
- Asphalt Institute SP-2, "Superpave Level 1 Mix Design"
- Uniform Manual of Traffic Safety
- ACI Manual of Concrete Practice

### **0.4 OWNERSHIP OF PRICE REDUCTIONS**

Where work performed using these specifications is for an Owner or Developer and the pavement is to be maintained by the **AGENCY**, all out of specification work or materials shall be accepted solely at the option of the **AGENCY**. Any penalties, price reductions or other compensation including warranties, bonds, etc. for out of specification work shall become property of the **AGENCY**.

### **0.5 TESTING AND INSPECTION**

At the sole discretion of the **AGENCY**, testing and inspection may be done by **AGENCY** personnel, **CONTRACTOR** personnel or Independent Laboratory personnel. Should the **AGENCY** elect to allow **CONTRACTOR** testing, a QC plan in accordance with Special Provisions shall be submitted for approval and the **AGENCY** shall provide QA testing. The **AGENCY** may require testing to be performed by Independent Laboratories, but paid for by the **CONTRACTOR**.

#### 0.5.1 Laboratory and Testing Equipment

The testing laboratory shall have been inspected and evaluated by the AASHTO or A2LA for the tests it shall perform. Inspection comments and documentation of the action taken by the laboratory to correct any efficiency in procedures or equipment shall be available to the **AGENCY** upon request. All of the testing equipment used to conduct testing shall conform to the standards specified in the test procedures and be in good working order.

#### 0.5.2 Personnel Qualifications

The person responsible for the Quality Control testing shall be Registered as a Professional Engineer in the State of Colorado and practicing in this field.

Technician shall be:

- A. Certified as Level II or higher NICET in the specific area where they perform tests, i.e. soils, concrete, etc.
  - 1. Technicians taking concrete samples and conducting field tests must have a valid ACI Field certification or equivalent.
  - 2. Technicians conducting tests of Portland Cement Concrete for compressive strength shall possess a valid ACI Laboratory Grade I certification or equivalent.
  - 3. Technicians conducting tests of Portland Cement Concrete for flexural strength and determining mixture design characteristics shall possess a valid ACI Laboratory Grade II certification or equivalent.
  
- B. Technicians performing Quality Control and Quality Assurance sampling, splitting or testing on Hot Mix Asphalt Pavement materials in the field and laboratory must possess one or more of the following qualifications:
  - 1. Technicians sampling hot mix asphalt materials or conducting nuclear asphalt density tests must possess a valid LabCAT Level A certification.

2. Technicians conducting tests of Asphalt Content, Bulk Specific Gravity, Maximum Specific Gravity or Asphalt Aggregate Gradation for hot mix asphalt must possess a valid LabCAT Level B certification.
3. Technicians determining Asphalt Mixture Volumetric Properties, Hveem Stability or Resistance to Moisture Induced Damage must possess a valid LabCAT Level C certification.