

## 700 MATERIAL DETAILS

### ITEM 701 CEMENTITIOUS MATERIALS

**701.00 Acceptance.** Provide cements meeting 701.01, 701.02, 701.04, 701.05, 701.07 and 701.09 and certified according to ODOT Supplement 1028; fly ash meeting 701.13 and certified according to ODOT Supplement 1026; ground, granulated blast furnace slag meeting 701.11 and certified according to ODOT Supplement 1034; and micro silica meeting 701.10 and certified according to ODOT Supplement 1045 without prior sampling, testing and approval by the City. The ODOT Laboratory maintains lists for certified cement, fly ash, GGBF slag and micro silica sources.

**701.01 Air-Entraining Portland Cement.** Provide air-entraining portland cement according to ASTM C 150, Type IA.

**701.02 Portland Cement.** Provide portland cement according to ASTM C 150, Type II.

**701.04 Portland Cement.** Provide portland cement according to ASTM C 150, Type I.

**701.05 High Early Strength Portland Cement.** Provide high early strength portland cement according to ASTM C 150, Type III.

**701.07 Masonry Cement.** Provide masonry cement according to ASTM C 91.

**701.09 Slag Modified Portland Cement.** Provide slag modified portland cement according to ASTM C 595, Type IS (< 25).

**701.10 Micro-Silica.** Provide micro-silica according to ASTM C 1240. Do not use micro-silica admixtures in dissolvable bags.

**701.11 Ground Granulated Blast Furnace (GGBF) Slag.** Provide ground granulated blast furnace (GGBF) according to ASTM C 989, Grade 100 minimum.

**701.13 Fly Ash for Use in Portland Cement Concrete.** Provide fly ash according to ASTM C 618, Class C or F, except ensure a maximum loss on ignition (LOI) of 3 percent.

The City may approve fly ash treated with a chemical conforming to ODOT Supplement 1115 from sources certified according to ODOT Supplement 1026 and with an LOI greater than 3 percent.