

Section 975

**GUIDELINES FOR WELL-GRADED COMBINED AGGREGATE GRADATIONS**

**References:**

UDOT Standard Specification Section 03055  
 UDOT Minimum Sampling and Testing Requirements

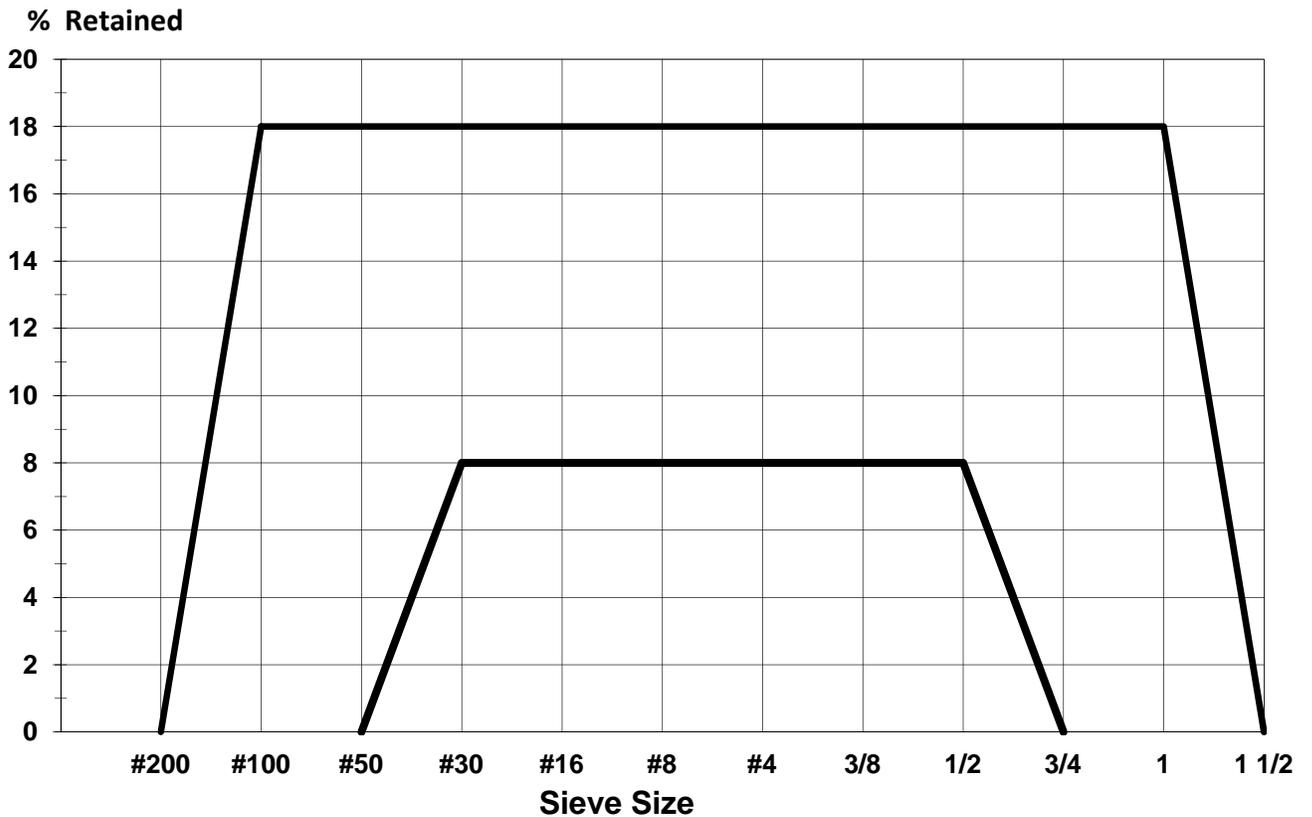
**975.01 Objectives**

The objective of well-graded aggregate gradations is to proportion the aggregate volumes such that paste volume is reduced to a minimum.

**975.02 Proportioning**

Use the 8-18 percent-retained and the Coarseness Factor charts below to proportion combined aggregates. The 0.45 Power Chart can be used to adjust the proportions. Design the combined gradation to fit within the bands of the 8-18 percent-retained chart.

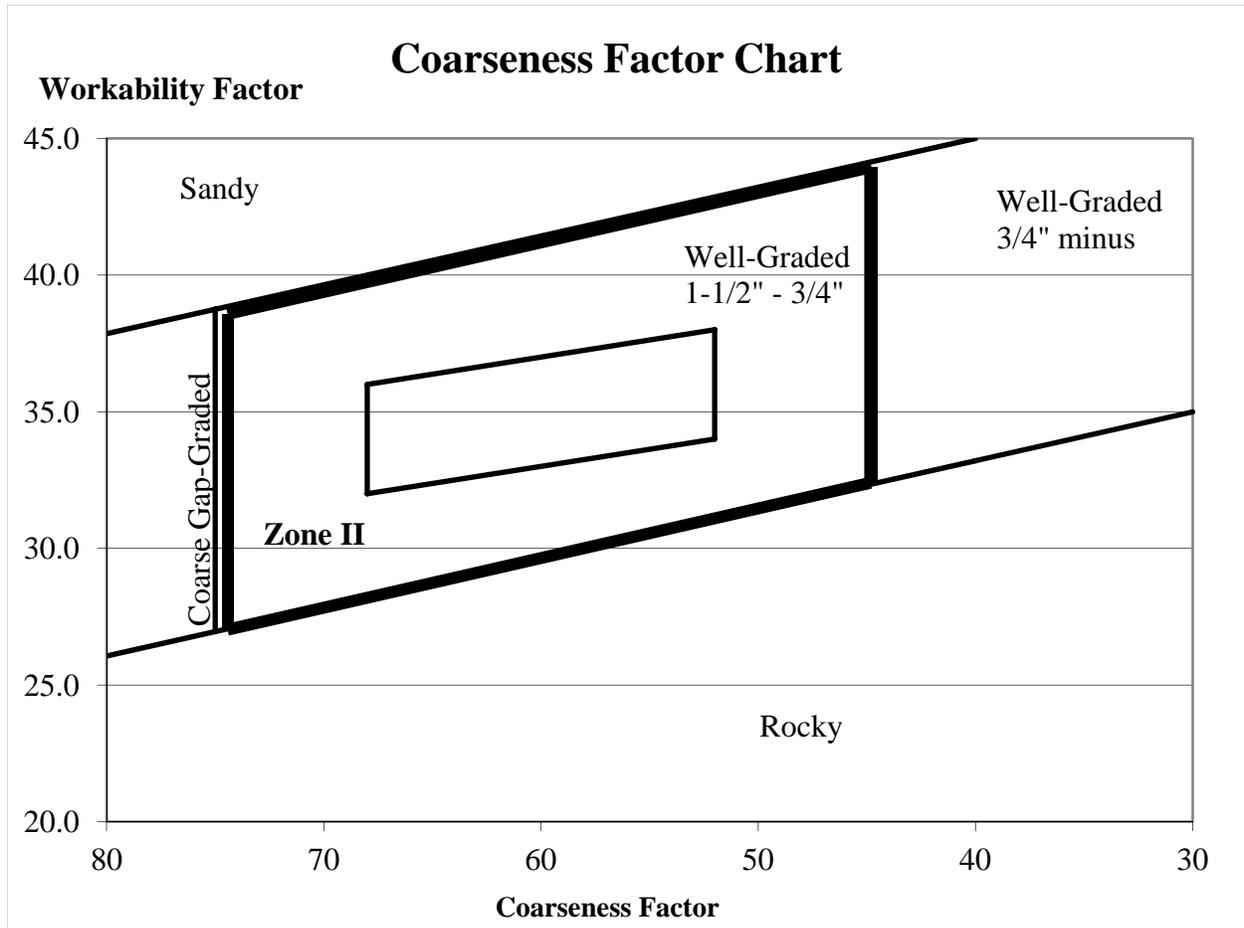
**Combined Aggregate Gradation, % Retained**



The coarseness factor point when plotted should fall within the zone II box. Calculate the coarseness factor and workability factor and plot the point as follows:

$$\text{Coarseness Factor (CF)} = \frac{\text{Percent retained on the 3/8" sieve}}{\text{Percent retained on the No. 8 sieve}} \times 100$$

$$\text{Workability Factor} = \text{Percent passing the No. 8 sieve} \times 100$$



**975.03 Testing Procedure**

Test in accordance with the applicable UDOT Standard Specification and UDOT Minimum Sampling and Testing Requirements.