

## SECTION 117

### AGGREGATES FOR GRANULAR BASES AND SURFACING

#### 117.1 DESCRIPTION

**A. General:** The material shall conform to the specifications for the particular material required by the contract. The material shall be sound durable particles of ledge rock or gravel. The material may include limited amounts of fine soil particles, but shall be free of vegetation or organic debris, paper, metal, glass, and other foreign material.

#### B. Related Work:

Section 20 Granular Bases and Surfacing  
Section 203 Submittals

#### 117.2 MATERIALS

A. Aggregates for granular bases and surfacing shall conform to the requirements of Table 1.

**TABLE 1**

REQUIREMENT	Subbase	Gravel Cushion	Aggregate Base Course	Limestone Ledge Rock		Gravel Surfacing
				Base Course	Gravel Cushion	
<b>Sieve</b>	<b>Percent Passing</b>					
6 inch						
2 inch	100					
1 inch	70-100	100	100	100	100	
3/4 inch		80-100	80-100	80-100	80-100	100
1/2 inch		68-91	68-91	68-90	68-90	
#4	30-70	46-70	46-70	42-70	42-70	50-78
#8	22-62	34-58	34-58	29-53	29-53	37-67
#40	10-35	13-35	13-35	10-28	10-28	13-35
#200	0.0-15.0	3.0-12.0	3.0-12.0	3.0-12.0	3.0-12.0	4.0-15.0
<b>Other Properties</b>						
Liquid Limit (max)		25	25	25	25	
Plasticity Index	0-6	0-6	0-6	0-3	0-3	4-12
LA Abrasion Loss (maximum)	50	40	40	40	40	40
Crushed Particles (minimum) + #4 Sieve	30% 1-CF	30% 1-CF	30% 1-CF	30% 1-CF	30% 1-CF	30% 1-CF
<b>Foot Notes</b>		*2	*1, *2			

\*<sup>1</sup> The fraction passing the #200 sieve shall not be greater than 2/3 of the fraction passing the #40 sieve. In no case shall the upper limit specified for the #200 sieve be exceeded.

\*<sup>2</sup> Requirements apply to ledge rock other than limestone ledge rock.

**B. Sampling & Testing:**

Sampling .....	SD 201
Gradation .....	SD 202
Liquid Limit and Plasticity Index .....	SD 207
LA Abrasion Test.....	SD 204
Crushed Particles.....	SD 211

Aggregate supplier shall submit sampling and testing results to the City annually for each source. The annual sampling and testing results shall be provided by a certified testing agency and the cost shall be borne by the supplier. Additional testing may be performed by the Engineer with cost borne by the City.

When removing aggregate from a stockpile a reasonable effort shall be made to ensure well-mixed material is delivered to the project site.

**C. Clay Binder:** When required for gravel surfacing, shall conform to SDDOT Standard Specifications for Roads and Bridges, current edition, Section 883.

**117.3 METHOD OF MEASUREMENT**

Measurement of aggregates for granular bases and surfacing shall be in accordance with Section 20.

**117.4 BASIS OF PAYMENT**

Payment of aggregates for granular bases and surfacing shall be in accordance with Section 20.

**END OF SECTION**