# SPECIFICATIONS FOR AGGREGATE FOR TRAFFIC GRAVEL

### 910. 1 SCOPE

These Specifications govern all operations necessary for and pertaining to the production of aggregate for Traffic Gravel.

### 910. 3 MATERIALS

### 3.1 Source of Supply

The Contractor shall, at least ten days prior to the commencement of production, notify the Engineer as to the source of all aggregate to be used on the project including supplementary granular material.

At the request of the Contractor, the Department will test representative aggregate samples obtained from the source of supply. Each sample shall contain not less than 45 kg45kg and the Contractor shall assume all costs incurred in obtaining and transporting the samples to the Department's Testing Laboratory.

Test results for gradation and physical properties will be provided but will not constitute acceptance of material in the source of supply.

Prior to the production of aggregates, the source of supply shall be cleared, grubbed and stripped of overburden to an extent and in a manner satisfactory to the Engineer.

# 3.2 Aggregate Requirements

Aggregate and supplementary granular material shall consist of sound durable particles of crushed rock, gravel, stone, sand and fines free from sod, roots and organic material.

The crush count is defined as the percentage by weight of aggregate particles retained on a 4.<del>75</del> mm**75mm** sieve which have at least one freshly fractured face.

The Los Angeles abrasion loss and gradation analysis will be performed using A.S.T.M. test procedures.

Shale Content is defined as the percent by weight of the particles retained on a 4.<del>75 mm</del>**75mm** sieve that are shale particles.

The processed aggregate shall be well-graded and shall not vary from maximum to minimum of the specification ranges for consecutive sieve sizes. The gradation and physical requirements for each Class shall be as follows:

# 910. 3.2 Aggregate Requirements (Cont'd)

# **Traffic Gravel**

Passing Standard Sieves	Class "A"		Class "B"	Class "C"	Class "D"	
	Gravel	Quarried Limestone	Gravel	Gravel	Quarried Limestone	Quarried Rock
25 mm sieve			100 %	100 %	100 %	
19 mm sieve	100 %	100 %			85 – 100 %	
16 mm sieve						100 %
12.5 mm sieve	75 – 90 %		70 – 90 %	60 – 95 %		
4.75 mm sieve	45 – 70 %	35 – 60 %	40 – 70 %	30 – 70 %	35 – 60 %	30 – 60 %
425 um sieve	10 – 35 %		10 – 35 %	5 – 35 %		
75 um sieve	8 – 15 %	6 – 17 %	0 – 15 %	0 – 15 %	0 – 17 %	0 – 10 %
Min. Crush Count	35 %	100 %	35 %	25 %	100 %	100 %
Max. Los Angeles Abrasion Loss	45 %	45 %	45 %	45 %	45 %	
Max. Shale Content	12 %		12 %	15 %		

# 3.3 Contractors Options

For the following bid items, the Contractor may supply the corresponding optional material.

<u>Bid Item</u>	Optional Material
Traffic Gravel, Class "A"	Class "A" Gravel Class "A" Quarried Limestone
Traffic Gravel, Class "B"	Class "B" Gravel Class "D" Quarried Rock Class "D" Quarried Limestone
Traffic Gravel, Class "C"	Class "C" Gravel Class "D" Quarried Rock Class "D" Quarried Limestone
Traffic Gravel, Class "D"	Class "D" Quarried Rock Class "D" Quarried Limestone

#### 910. 5 PRODUCTION METHODS

# 5.1 Adding Supplementary Granular Material

The addition of supplementary granular material shall be controlled so that the final product is uniform and within the gradation requirements of the specification. Mixing supplementary granular material with pit material may be necessary to ensure uniformity.

The supply and addition of supplementary granular material will be considered as incidental to the unit price for Traffic Gravel.

### 5.2 Quarried Material

All quarried material processed through the crusher shall be included in the final product.

The addition of supplementary granular material to a quarried material will not be permitted.

#### 910 7 TESTING

Traffic gravel will be subject to testing by the Engineer at the time the material is being produced. Before hauling, the Contractor shall place the processed aggregate in a stockpile separate from the surge pile until satisfactory production tests have been completed. Rejected material shall be immediately moved either to the vicinity of the feed end of the crusher for reprocessing or to an area completely removed from any approved aggregate. Where tests indicate consistently uniform aggregate that is well within gradation limits, direct hauling from the crusher to the road will be permitted.

# 7.1 Sampling Device

Crushers shall be equipped with an approved mechanical sampling device for obtaining samples off the main delivery belt. Crushers operating secondary delivery belts feeding in excess of 150 tonnes per hour shall require a second approved mechanical sampling device. Secondary delivery belts feeding less than 150 tonnes per hour will require the Contractor to supply either a "V" board or a second approved mechanical sampling device.