

PART 1 - GENERAL

1.1 SUMMARY

- .1 This Section defines correction to maximum dry density to take into account aggregate particles larger than 19 mm.

1.2 REFERENCES

- .1 Codes and standards referenced in this section refer to the latest edition thereof.
- .2 American Society for Testing and Materials (ASTM).
- .1 ASTM C127-04, Standard Test Method for Density, Relative Density (Specific Gravity) and Absorption of Coarse Aggregate.
- .2 ASTM D698-00a1, Standard Test Methods for Laboratory Compaction Characteristics of Soil Using Standard Effort (12,400 ft-lbf/ft<sup>3</sup>)(600 kN-m/m<sup>3</sup>).
- .3 ASTM D1557-02e1, Test Method for Laboratory Compaction Characteristics of Soil Using Modified Effort (56,000 ft-lbf/ft<sup>3</sup>)(2,700 kN-m/m<sup>3</sup>).
- .4 ASTM D4253-00, Standard Test Methods for Maximum Index Density and Unit Weight of Soils Using a Vibratory Table.

1.3 DEFINITIONS

- .1 Corrected maximum dry density is defined as:
- .1  $D = (D1 \times D2) / ((F1 \times D2) +$

- (F2 x D1))
- .2  $D = (F1 \times D1) + (0.9 \times D2 \times F2)$
- .3 Where: D = corrected maximum dry density kg/m<sup>3</sup>.
- .1 F1 = fraction (decimal) of total field sample passing 19 mm sieve
- .2 F2 = fraction (decimal) of total field sample retained on 19 mm sieve (equal to 1.00 - F1)
- .3 D1 = maximum dry density, kg/m<sup>3</sup> of material passing 19 mm sieve determined in accordance with Method A of ASTM D 698.
- .4 D2 = bulk density, kg/m<sup>3</sup>, of material retained on 19 mm sieve, equal to 1000G where G is bulk specific gravity (dry basis) of material when tested to ASTM C 127.
- .4 For free draining aggregates, determine D1 (maximum dry density) to ASTM D 4253 dry method when directed by Departmental Representative.

PART 2 - PRODUCTS

2.1 NOT USED .1 Not Used

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PART 3 - EXECUTION

3.1 NOT USED .1 NOT USED

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