24th February, 1958.

MEMORANDUM:

LIMESTONE IN CONCRETE.

I think it is too premature to bring in the proposed amendment in which any limestone is prohibited as an aggregate for concrete.

Before the limestone from Weiley's or any other quarry is prohibited the following investigations should be made.

- 1. A series of physical tests by the Materials Research Laboratory of the Public Works Department.
- 2. Chemical tests to ascertain the percentages of alumina and silica respectively in the limestone.
- 3. Geological and microscopic examination to determine whether Shale bands occur in the limestone or whether the majority of the silica is bound up in the limestone.
- 4. Washing tests to determine whether any clay or shale can be removed by washing.

Searle in "Limestone and its Products" 1935 states "The inclusion of limestone among the prohibited materials in the London County Council Regulations for Concrete appears to be based on some misunderstanding." He also states "When a choice of several kinds of limestone is possible, preference should be given to a Carboniferous Limestone or to a highly siliceous limestone, as these make a stronger concrete than the Dollite".

(T.D. Hughes) SENIOR GEOLOGIST.

Director of Mines, Department of Mines, HOBART.