DEPARTMENTAL MEMORANDUM

TO: Borough Superintendents

FROM: Thomas V. Burke, Director of Operations

SUBJECT: Ultimate Strength Design

DATE: July 24, 1969

In a memorandum to you from Commissioner John T. O'Neill dated July 17, 1969, permission was granted to Borough Superintendents to authorize the use of Ultimate Strength Design, conditioned by stipulations specified in an authorization which accompanied the memorandum.

Stipulation No. 1 in the authorization requires the design to comply in all respects with applicable provisions of the ACI Building Code (ACI 318-63) relating to Ultimate Strength Design.

Under the provisions of Section 1708(b) of the ACI 318-63 Building Code, when structural lightweight aggregate concrete is used, the value of FSP, the ratio of splitting tensile strength to the square root of the compressive strength, shall be 4.0 unless determined for the particular aggregate in accordance with Section 505.

The value of FSP used in design shall appear on the approved structural plans. Where the value of FSP is other than 4.0, the value is to be determined for a particular aggregate in accordance with Section 505. Test data shall be filed with this department on a "Controlled Concrete Design Mix" Amendment form 10B and the calculated value of FSP is to appear on the Amendment form. This calculated value of FSP is to be checked against the design value.

(Signed)

Thomas V. Burke
Director of Operations