THESIS TITLE DEVELOPMENT OF SOUNDING TEST EQUIPMENT FOR THE

DETERMINATION OF PILE LENGTH

AUTHOR Mr. SURIN SANGTHAITAVEPORN

THESIS ADVISORY COMMITTEE

Chairman

(Associate Professor Dr. Indarachai Hovichitr)

N.L.C.

(Associate Professor Dr. Narong Kularb)

D. Howeler

(Associate Professor Dumrong Homdee)

ABSTRACT

The purpose of the thesis was twofold: to study the sounding test constructed by manpower in order to find the length of pile bridge and to develop the sounding test equipment by means of hammering weight and steady head dropping between hammer and steel rod.

The testing was accomplished by comparing among the sounding test constructed by equipment hammering, manpowered hammering, the pile driving, and the ultimate bearing capacity of pile bridge sizes 35 x 35 cm. and 40 x 40 cm. The test result was that the sounding test equipment could be used for the calculation of the length of pile bridge. It gave more reliability than using manpowered hammering. Finally, the test result could also be used to evaluate the ultimate bearing capacity of pile bridge.