CHAPTER VII

CONCLUSION

The conclusions drawn from this investigation of which the time was limited are as follows :-

1. The failure of piles are suddenly when the ultimate load is reached or after the mobilization of shaft friction.

2. The failure settlement range from 4.4 mm. to 5.5 mm and recommended settlement for short piles failure is 5 mm.

3. The working load of short piles should be one-half of the ultimate load. (static loading)

4. The critical load-ratio of all piles should be 0.75

5. The quick-test method should be used to test the pile because it will give almost the same ultimate load as that from the ML test but with more simplicity and less time.

6. Based on vane shear test, the adhesion factor range from 0.48 to 0.57. Based on U/C test the adhesion factor range from 0.75 to 0.88

7. The effective perimeter is equal to the minimum perimeter multiplied by the reduction factor and must be used in calculating the shaft load. The reduction factor of the double-half moon shape is 0.86

8. The geometric shapes of short piles will almost give the same unit skin friction in soft clay, whereas the irregular boundary of piles will reduce the unit skin friction

9. The economical section of short piles should be, hollow, offering high value of specific perimeter.

10. Among the solid section, the equilateral triangular section is recommended, but the disadvantage of this section is that it gives low bending strength, out of centre during driving.

11. Stiff short piles should not be used in Bangkok clay because it is not economical.