22 maximum allowable variations for change in location and height of cables shall be ($\pm$5mm) in the vertical dimension and ($\pm$10mm) in the horizontal direction.

23. In case of possible occurrence of cracks in the concrete due to early shrinkage, it is recommended that the tension shall be done in two stages; in the first stage around (25%) of total tension force shall be applied. It shall be applied directly when the concrete reaches the required resistance in this stage which is usually around (10MPa) to (15MPa), it shall be achieved from concrete cubic or cylinder resistance tests done on site.

24. In the case of steel cables retracting after stress, retraction factor of (6mm) shall be used to calculate the resulting loss.

25. In case of cable stressing for slabs or systems comprised of secondary pre-stressed bridges/beams passing through main bridges/beams, attention must be paid to the sequence of stressing operation to avoid damaging the formworks of the major bridges/beams.

26. In locations of two way columns, at least one channel comprised of 2 cables shall pass through the column support or wall, if not possible, additional lower reinforcement steel shall be added in these areas equivalent to (1.5) the value of the steel needed for flexural reinforcement, the ratio of the steel shall not be less than (2.1bw.d/f_y) where (bw) is the width of the column or wall support from the direction of steel entry. The steel shall extend after the support for an equivalent of or more than fixing length.

Soil and Foundation Tests

Article e (57)

1. Design and Geotechnical works Codes

The design shall be done in accordance with the updated American, European or British codes

2. Soil Investigation

2.1 Eurocode 7 – Geotechnical design

2.2 BS 5930 – Code of practice for ground investigation

2.3 BS1377- Methods of testing for soil for civil engineering purposes

2.4 Requirements and regulations of Emirates International Accreditation Center (EIAC)

2.5 BS 10175 Investigation of potentially contaminated site

2.6 ASTM international

2.7 American Association of State Highway and Transportation Officials (ASSHTO)