SECONDARY COMPRESSION

$$\Delta = C_\alpha H \log \left(\frac{T_2 - T_0}{T_1 - T_0} \right)$$

C_α = Coefficient of secondary compression

C_α = 1.5 - 2.0%

H = Thickness of Bay Mud

ANALYSIS OF SETTLEMENTS AT MISSION STREET

1. End of Filling: T_0 = 1859
2. End of Primary Consolidation T_1 = 1965
3. Secondary Consolidation from 1965 to 1985
4. Measurements

Point	Settlement (in.)
1	1.2
2	1.9
3	1.6
4	1.4
5	1.6
Average	1.5

5. Estimate Settlements from 1965 to 1985

   H = 90ft T_1 = 1965 T_2 = 1985

   Δ = 0.02 x 90 x 12 x log (126/106) = 1.6 in.

FUTURE SETTLEMENTS

1. 30 years after construction: 1995 to 2025

   Δ = 0.02 x 90 x 12 x log (166/136) = 1.9 in.

2. 50 years after construction: 1995 to 2045

   Δ = 0.02 x 90 x 12 x log (186/136) = 3.0 in.