A note on *Sparse permutation invariant covariance estimation*

From equation (16) and the norm inequality below it,

$$G(\Delta) \geq \|\Delta\|_F^2 \left[\frac{1}{4}\underline{k}^2 - C_1\frac{1+\epsilon}{\epsilon M} - \frac{C_2}{M}\right] > 0$$

for $M$ sufficiently large.