$$K_{44}^{1} = \begin{bmatrix} 0 & \frac{3-\mathbf{i}\sqrt{3}}{\sqrt{2}} & -\left(\frac{\sqrt{2}\,U}{t}\right) \\ \frac{-3-\mathbf{i}\sqrt{3}}{\sqrt{2}} & -\mathbf{i}\sqrt{3} & \frac{U-\mathbf{i}\sqrt{3}\,U}{2\,t} \\ \frac{\sqrt{2}\,U}{t} & \frac{-\left(U+\mathbf{i}\sqrt{3}\,U\right)}{2\,t} & \mathbf{i}\sqrt{3} \end{bmatrix}$$