In recent work, Jon Kleinberg considered a small-world network model consisting of a d-dimensional lattice augmented with shortcuts.The probability of a shortcut being present between two points decays as a power, $r^{-\alpha}$ of the distance r between them. Kleinberg showed that greedy routing is efficient if $\alpha = d$ and that there is no efficient decentralized routing algorithm if $\alpha \neq d$. The results were extended to a continuum model by Franceschetti and Meester. In our work, we extend the result to more realistic models constructed from a Poisson point process, wherein each point is connected to all its neighbours within some fixed radius, as well as possessing random shortcuts to more distant nodes as described above.