962-05-1041 Michael L Develin* (develin@math.berkeley.edu), Stephen G Hartke (hartke@math.rutgers.edu) and David P Moulton (moulton@idaccr.org). A General Notion of Visibility Graphs.

We define a natural class of graphs by generalizing prior notions of visibility, allowing the representing regions and sightlines to be arbitrary. We consider mainly the case of compact connected representing regions, proving two results giving necessary properties of visibility graphs, and giving some examples of classes of graphs that can be so represented. Finally, we give some applications of the concept, and we provide potential avenues for future research in the area. (Received October 01, 2000)