

GEM Engineering, Inc.

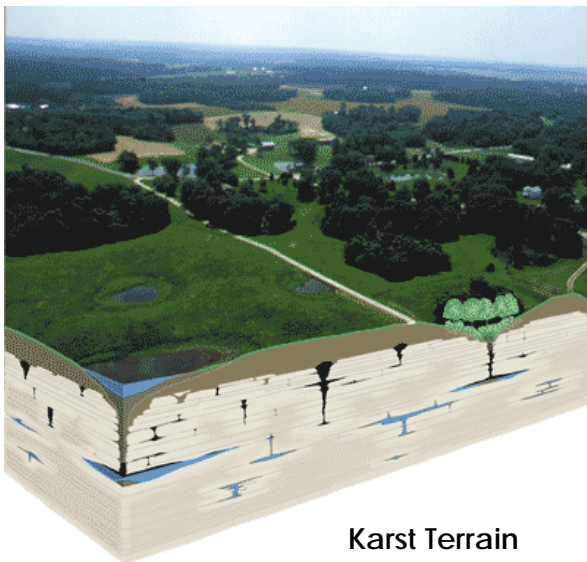
GEOTECHNICAL ENVIRONMENTAL & MATERIALS SERVICES

KARST TERRAIN

2008 LAND DEVELOPMENT CODE STANDARDS Jefferson County, KY

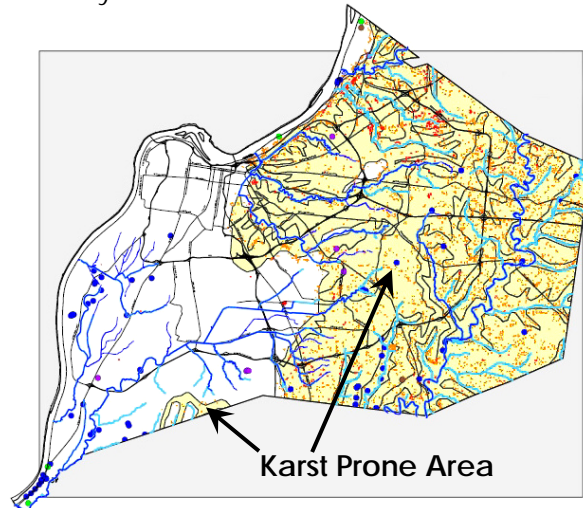
Cornerstone 2020 Comprehensive Plan guidelines call for protection of natural areas and for location of development, where possible, in areas that do not have severe environmental limitations. Consistent with this plan, the Louisville Metro Government recently adopted new standards (*Chapter 4, Part 9, of the Land Development Code*) for development on karst terrain. These standards are meant to protect the public health, safety, and welfare by regulating the development and use of environmentally constrained karst terrain.

What is karst terrain? Karst terrain is land, generally underlain by limestone or dolomite bedrock, in which the topography is chiefly formed by the dissolving of rock and which may be characterized by sinkholes, sinking streams, subterranean drainage, and caves. Concerns related to karst include: personal injury, property damage, structural instability, groundwater pollution, flooding, and preservation of the natural landscape.



Karst Terrain

What areas are affected? A Karst Prone Area Map is used by Louisville Metro Planning and Design to identify expected karst terrain. The eastern and southwestern portions of Jefferson County are included as shown below.



What is required? A karst study to identify sinkholes & other features is required when a land disturbing activity is proposed within the Karst Prone Area. Development over identified karst features requires recommendations for treatment from a geotechnical engineer licensed in KY. During construction, the engineer must confirm that the approved treatment was applied. Previously undetected karst features discovered during construction must be reported and similarly addressed.

Who to contact? Jerry Vandavelde, P.E., gtv@gemeng.com, Mike Ronayne, P.E., mronayne@gemeng.com, Samantha Schardein, P.E., schardein@gemeng.com, and Eric Springston, P.E., springston@gemeng.com, have successfully worked on many types of karst projects & are ready to help you meet regulatory requirements while reducing project impacts. Call or email us if you have questions about the new standards or other karst issues. A copy of the standards and the Karst Prone Area map can be emailed to you upon request.