

accessible via the Web site <http://www.ars-grin.gov/ars/Beltsville/na/hardzone/ushzmap.html>.

It is estimated that warming trends may have significant impacts over the next 100 years, with notable changes occurring by 2025. These changes may have significant impacts on the performance of designs under consideration today. Although there is no broad consensus as to how to address these concerns in design “on the boards,” designers should begin to consider incorporating the most likely scenarios and trends into their work. Trends in climate indicate different concerns for different parts of North America.

FEMA maps

The Federal Emergency Management Agency (FEMA) is best known for the flood maps it has published over the years. Just as the USGS is more than topographic maps, however, the FEMA provides much more to the site analysis process than flood information. The FEMA maintains a Web site that allows the designer to create a fairly site specific map of hazards related to earthquakes, tornadoes, wind, and hail as well as floods. The FEMA Web site (www.fema.gov) includes a number of valuable links including one specifically for design professionals’ questions. Unfortunately, the FEMA does not yet provide flood insurance maps online, but these maps may be purchased in either paper or digital form through the Web site. The FEMA does provide information on changes to the existing maps on its Web site.

Vegetation

An assessment of existing vegetation may tell a designer a great deal about a site. Evidence of second-growth vegetation is an indication of past activities that should be reconciled by the analyst with other sources of information. If the site indicates significant disturbance from past activities, there should be a record somewhere of what those activities were. The quality of vegetation is also an important consideration. The presence of good-quality specimens of trees or a valuable population of another type of plant might be important to protect or incorporate into a future design. The presence of water-tolerant plant species may indicate a high water table or frequent flooding whereas poor-quality or stressed vegetation may indicate problematic soil or subsurface conditions.

Prior to making a site visit, the analyst should consult local or state sources for information pertaining to protected plant species. In many cases the location of populations of protected species are mapped by such agencies. The discovery of such a plant population or community could have significant impact on the future use and development of the site.

The existence of certain trees or tree masses may contribute value to the finished project. Mature trees are known to increase the market value of property. A qualified arborist should be asked to assess the condition of specimen trees to determine the relative value of the tree. The location of a tree in the terms of the future development must also be considered. Although a variety of methods exist with which to base an evaluation, they generally have certain