

community it will be. Zoning maps provide an overview of the community's vision for itself, showing not only how a site may be developed or used but also how surrounding sites might be.

Zoning regulations may contain design criteria such as parking configurations, lot sizes, setbacks, road widths, road profile restrictions, and sign requirements. Local regulations may also include specific performance requirements such as noise, solar access, or pollution loading restrictions. Zoning ordinances restrict development only in the sense that they provide for the limits and conditions of development, but they facilitate development by providing developers with a guidance document. Having a clear evaluation of the zoning particulars of a site is a critical requirement of a complete site analysis.

Occasionally zoning may include overlay zones that have important implications for land use. Overlay zones such as steep slope restrictions, watershed protection, historic preservation, or aquifer protection zones may severely limit land development activities or require a higher order of performance from the design, construction, and operation of a site.

**Land development regulations.** The scope of land development regulations varies widely from place to place. Very often these regulations reflect an evolution of practices as much as they are a reflection of a cogent regulatory process. Local ordinances are most valuable because they provide a glimpse into the experience of a municipality by reflecting its concerns and bias. Some ordinances are very prescriptive while others are concerned more with performance. In any case, understanding the local land development ordinances is second only to understanding the zoning regulations.

Land development regulations typically include the requirements for local street design, open space, lighting, subdivision standards (to be considered in conjunction with the zoning requirements), minimum landscaping, and similar site development parameters. The primary differences between zoning and land development regulations lie in the underlying authority. While local officials may have the authority to waive or modify provisions of the land development ordinance on a case-by-case basis, zoning regulations are enforceable and cannot be waived without justification and a formal hearing process. Although procedures exist to provide for variances and exceptions to zoning ordinances, these are formal procedures that offer little latitude to zoning hearing boards.

Zoning requirements of initial concern include the permitted uses, density allowances, minimum lot sizes, setbacks, and open space specifications. Care should be taken to consider the effect of wetlands, floodplains, or other site conditions that might influence the useful area in terms of density on the proposed site. Some zoning ordinances require special setbacks between different types of uses such as a buffer area between residential and commercial land uses. The requirement for buffers, screening, and open space should also be noted.

**Utility mapping.** Location of utilities is made possible using maps provided by local utility companies. The increase in the use of geographic information systems (GISs) has helped to provide reasonably accurate utility data in most