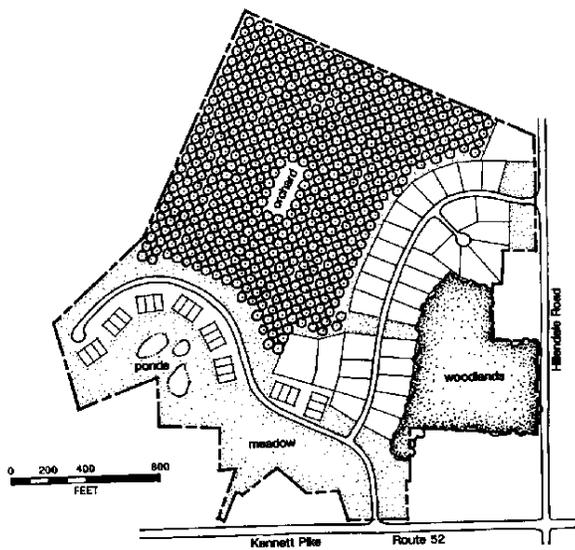


Rural Residential

RR.1 Conserving Orchards

The entire orchard operation was designed around and conserved (as “non-common” open space) in this conservation subdivision which also preserved all ten acres of native woodland habitat.

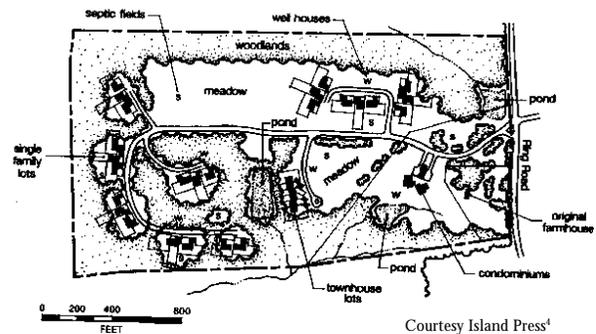


Courtesy Island Press⁴



RR.2 Conserving Meadows

Although the former farmland in this development was too small and fragmented to remain in production, its conversion to meadow use has improved wildlife habitat and offers residents attractive views that change with the season. In addition, this open space provides ideal areas for off-lot septic drain fields and also for community wells. This technique is worthwhile proposing even if health officials are unfamiliar with it because they frequently agree, after careful consideration, that this is an acceptable alternative.

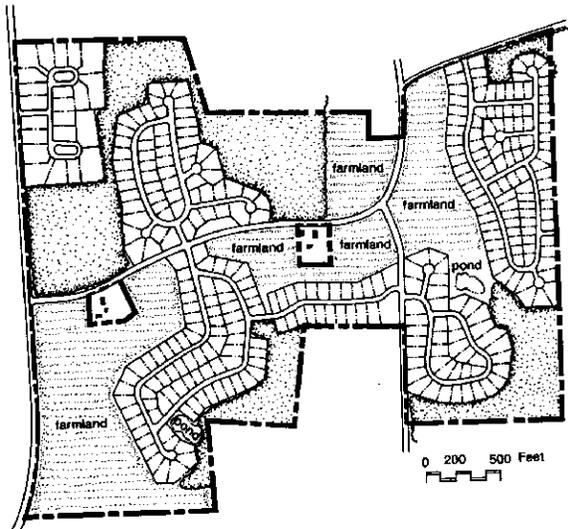


Courtesy Island Press⁴



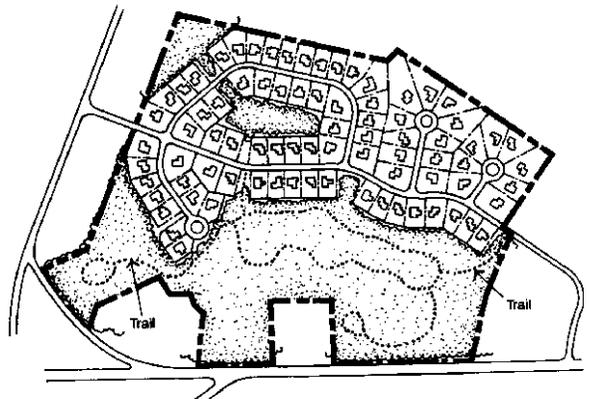
RR.3 Conserving Cropland

More than 500 acres of prime farmland have been preserved in this one township simply by applying conservation design principles to new subdivisions. The farmland in the subdivision was deeded to a local land trust, which leases the fields to local farmers in long-term arrangements. In return for reduced lease payments, farmers agree not to spread manure before holiday weekends.



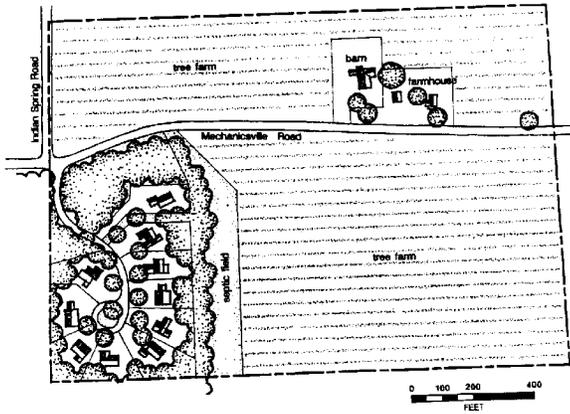
RR.4 Conserving Wooded Habitat

Homes abutting the woodland preserve in this development sold faster and at premium prices because buyers recognized the value added by proximity to protected lands. Installing the trail system before sales began, and making it a special marketing feature, enhanced the development's success.



RR.5 Creating a Nursery Business

A wholesale tree nursery occupies most of the open space in this conservation subdivision, where the original stone farmhouse was also preserved within its context of productive lands. Because this land and the farmstead buildings were situated within the public viewshed, the community's rural character was also protected in the bargain.



RR.6 Creating an Equestrian Business

Converting fragmented cornfields to horse pastures proved to be a very workable solution, with a commercial equestrian facility owning and managing most of this subdivision's open space, relieving the homeowner association of that responsibility. Residents, however, have a large central recreation area, complete with ballfields and playground equipment, to cater to their active recreation needs.



RR.7 Relaxing Backyard Vistas – 1

Views of the orchard from the decks of the homes which back up to it are spectacular in the Springtime, but provide vistas that soothe the spirit at any time of the year.



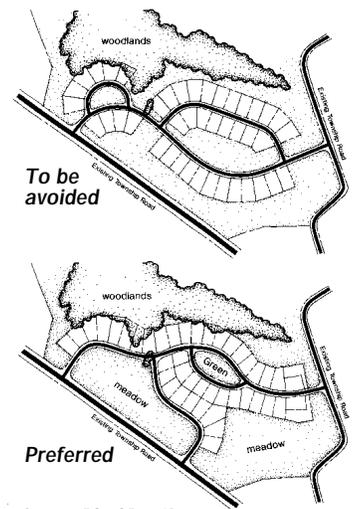
RR.8 Relaxing Backyard Vistas – 2

Many people with busy lives tend to look for peace and serenity when buying a new home in the countryside. But the only way to guarantee that the bucolic view which attracts them initially will still be there in the future is to design the development with permanently protected greenspace, such as this land protected through a perpetual conservation easement. Designating this conservation land as “non-common open space,” used by a commercial business compatible with adjacent housing, reduces annual maintenance costs for the homeowners’ association, provides developers with an additional economic incentive, provides more local employment opportunities, and generates more real estate tax revenue for the Town.



RR.9 Foreground Meadows vs. “Fanny-first Design”

This pair of drawings illustrates how “foreground meadows” can help buffer new homes built on parcels adjoining major roads. Homes located alongside a “single-loaded street” (i.e., one with lots on one side only) look out over a meadow so that the inward view from the town road (or rural highway) bordering the property is one of a large green area edged with house fronts, which are always more visually appealing than house-backs (with their sliding glass doors, decks, sheds, swing sets, clothes-lines, etc.). This approach also provides greater backyard privacy for residents, and avoids the suburban artifice of creating tall earthen berms along the highway (sometimes topped with shrubs) to block the view. In these two contrasting examples, the preferred layout costs the developer not a penny more, as the same street length is involved, serving the same number of lots, which are the same size and width in both cases. The inferior example is typical of many “cluster” subdivisions developed before proper design standards were devised to guide the location of open spaces and the arrangement of homes, as they relate to the pre-existing town or state thoroughfare running alongside the parcel. The following three figures, RR.10–RR.12, illustrate three applications of this concept.



Courtesy Island Press^{4,5}



RR.10 Conserving Rural Roadside Character – 1

The view from the road is of houses in the distance, located at the far edge of a greensward, which itself is separated from the county road by a conservation meadow.



RR.11 Conserving Rural Roadside Character – 2

Water features provide excellent roadside buffers, creating areas of special visual interest for both travellers and residents.



RR.12 Conserving Rural Roadside Character – 3

The area bounded by white-board fencing along the old town road could easily serve as a paddock for horses or for any number of other “green” uses. It achieves the multiple purposes of visual buffering, generating local employment, supplementing the local property tax base, and reducing homeowner association responsibilities (and annual dues). Due to outdated codes, these various beneficial kinds of “non-common” open space usage are not currently acknowledged as legitimate ways to utilize the “open space” in new subdivisions in most communities.



RR.13 Attractive, Functional, Safe Rural Streets

In areas where lot sizes are sufficiently large to accommodate off-street parking for residents and visitors (i.e., more than 15,000 sq. ft.), streets can and should be designed with two travel lanes and without parking lanes. The resulting pavement would typically be about 18 to 20 feet wide, less than is commonly required in many upstate New York towns, and safer because they do not induce higher travel speeds as do wider streets. Curbs and gutters can usually be replaced by “open-section” swales which are less costly, more rural in appearance, and more able to promote desirable groundwater recharge. Shade trees are frequently prohibited from street rights-of-way by engineers who commit the common error of applying highway standards to local street design. While trees may constitute “fixed deadly objects” along roads where vehicles routinely whiz by at 55 mph, their presence



along residential streets actually tends to “calm” traffic, by enclosing the street visually and conveying to drivers the subtle message that these are places where travel faster than 25 just doesn’t feel right.

RR.14 “Single-Loaded” Streets

This example illustrates the progressive street design concept of “single-loading” (where houselots are located on one side only), allowing the land on the opposite side to be preserved as permanent open space. This approach is not any more costly than conventional “double-load-



ing” because, in conservation subdivisions where lot sizes and lot widths are usually reduced, site designers use the developed side more efficiently (with more lots per 1000 feet of street), thus generating the ability to dedicate part of the other side to open space uses. From an overall economic perspective, this approach can actually be more beneficial, as lots tend to sell faster (and often command premium prices) when they look across to conservation land. As one homeowner put it, “the view is more uplifting than the view of someone’s garage doors across the street.” In rural situations, single-loaded streets are often used to showcase attractive open space features such as meadows, fields, orchards, ponds, etc., whereas in village situations they typically border neighborhood greens or ballfields.

RR.15 Planting Islands

Canopy shade trees planted within cul-de-sac islands help fill the vast “celestial space” existing at the ends of these truncated streets, areas that are normally quite empty and ugly. Some communities have begun to require this kind of design feature because of the grace and beauty they add to an otherwise dismal asphalt wasteland. By being combined with the concept of “rain gardens” (see Figure RR.17), they can also double as “bio-retention areas” to assist with stormwater retention and groundwater recharge. In addition, they also make snowplowing much easier, as plowtrucks simply proceed around their outside edge in a single circular sweep, rather than having to back up four or five times to scrape the snow away with repeated parallel pushes.



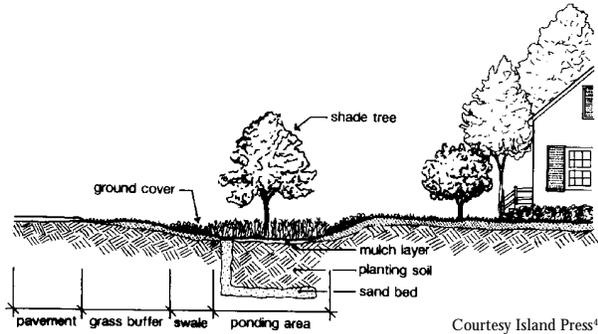
RR.16 Managing Stormwater Gracefully and Effectively

In contrast with the typical deep detention basins resembling bathtubs or bomb craters, broad, shallow “sunken meadows” like this one actually do a superior job of managing stormwater. Besides being so visually subtle that they blend in with the surrounding rural landscape, they promote groundwater recharge. In more built-up areas, they can double as playingfields, edged with very low berms punctuated with small outlet pipes that release the impounded water slowly. In Cattaraugus County, with its long winter seasons, some of these areas could become popular skating ponds which, due their extremely shallow depth (generally under one foot), would pose no safety hazards even when the ice is thin. The example here is a town green graded specifically to serve as a skating facility during the colder months of the year.



RR.17 "Rain Gardens"

This cross-sectional view of a "rain garden" shows its various component elements and their relationship to roads, swales, lawns, and houses. Such features help manage stormwater more effectively, replenishing local aquifers while at the same time adding beauty and interest to the neighborhood landscape.



RR.19 Greenway Links

Greenways are linear swathes of protected open space that typically follow stream valleys, ridgelines, or even utility line easements. At their most basic level they provide for wildlife travel corridors, but can easily become informal trail networks for its human residents as well. They are a typical feature of conservation subdivisions, and offer the potential of evolving into community-wide footpath systems as adjoining parcels of land are developed. This linkage process is aided when towns add area-wide greenway maps to their comprehensive plans, and when they update their subdivision regulations to require that developers incorporate such connections when laying out new subdivisions



RR.18 Infiltration Trenches

Nearly every raindrop that falls into this higher density subdivision (built at 4.5 dwellings/acre) remains within the property. This impressive standard of minimizing the *volume* of runoff (not merely controlling the *rate* of runoff) was achieved simply by digging trenches in the lowest areas of the development and backfilling them with sand and gravel. These impressive features are typically located within greenway corridors that follow the natural lines of drainage across the subdivision.



Courtesy American Planning Association³