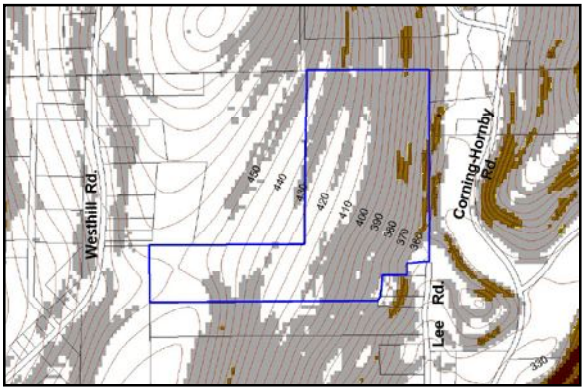
6: Good Design - Stevens Site

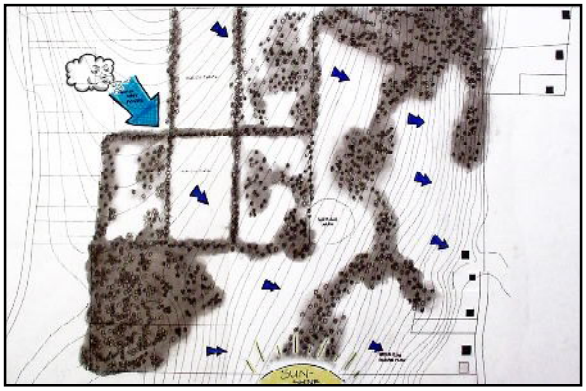
Site Introduction:

Dale Stevens, a developer and home builder, and Peter Marchese, a professional forester, approched the STCRPDB to participate in the program in order to assess the feasibility of developing Stevens' 74-acre property in the town of Corning. Both are interested in the environmental issues involved in its development. As the frontage on Lee Road is at the bottom of the hill and the connection to West Hill Road is only through an easement, and most of the site currently owned is wooded and sloped, Stevens has been approaching adjacent landowners about the possibility of expanding the site to 130 acres. The students supported this and decided to design for the larger, 130-acre parcel. The extended site's western portion is an old former farm, no longer in active use; its outer fields are beginning to go into succession. To the east, the site slopes away increasingly steeply under rather solid forest cover. The students determined that there were significant hindrances to development of the steepest portions, but that that land provided a potentially valuable amenity which could increase the value of any development on the flatter areas, which offered interesting opportunities for unusual design.

Site Analysis:



Slope Suitability

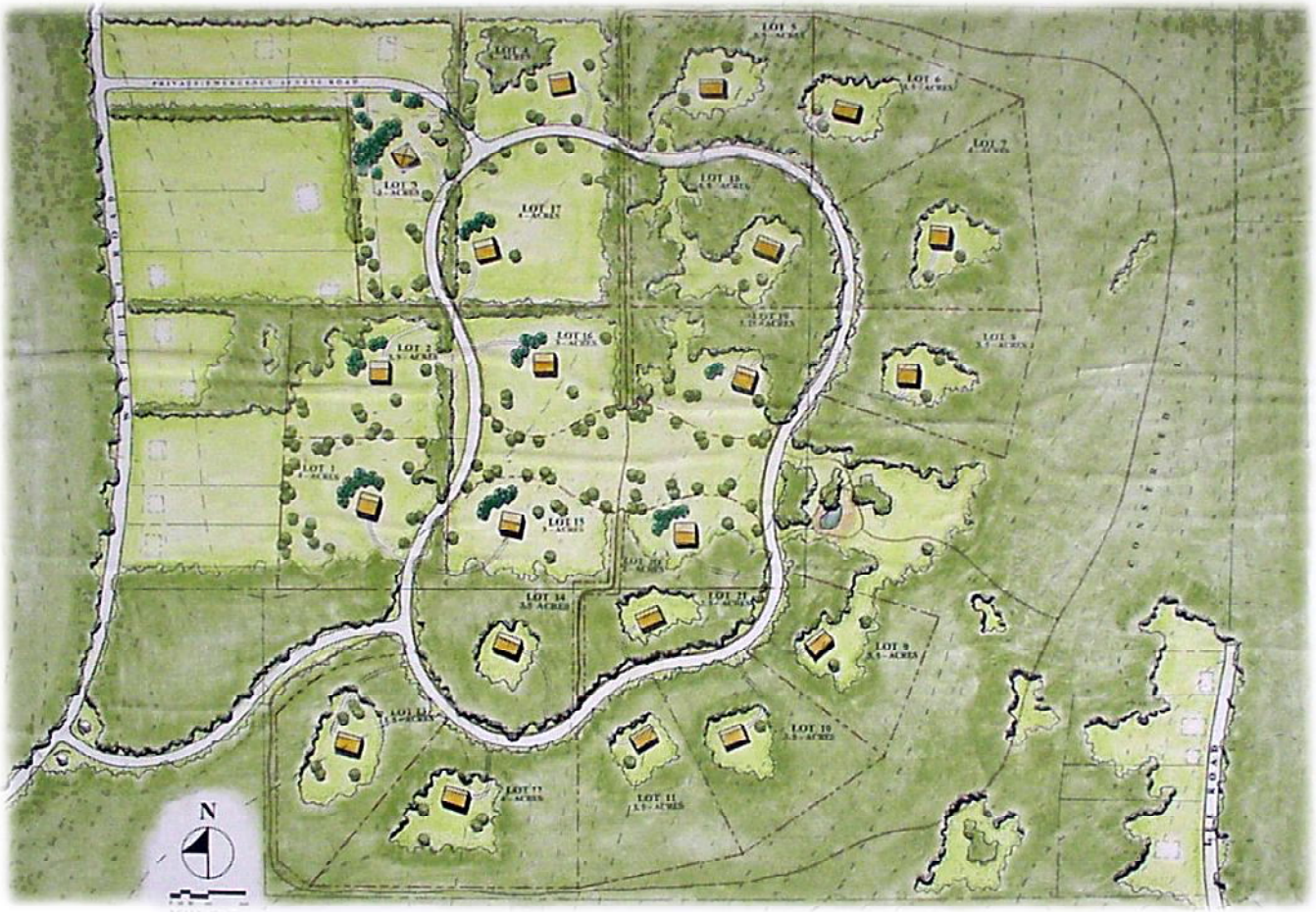


Wind, Water, and Sun Directions

Significant Features

Students Exploring the Site

Stevens Site: Rural Character and Wooded Lots



Design overview:

Despite similarities at first glance between this proposal and conventional subdivisions, a number of measures have been taken that are in line with the conservation approach. Attention has been paid to the rural character; the general quality both of old farm fields and hedgerows, and of the densely wooded areas, has been maintained. Roads cut unobtrusively into the borders of the fields, and travel across, not down, the slopes of the hill wherever possible. The houses in the woods are nestled into small clearings, on the most buildable land of their lot; the woodland on the rest of each lot is protected by conservation easements.

Highlighted Incentives:

- Forestry Incentive Program funding and Conservation Easements on individual lots help make the property very affordable and preserve the wooded feel of the site.
- The shared open space of the unbuildable lowest slopes can also receive Forestry Incentive Program funding, as well as a Conservation Easement.
- Strong attention has been paid to minimizing visual impact, both from neighboring properties and in terms of distant views.

Number of Lots: 21	Lot Sizes: 2..0 to 4.5 acres	% of Land Conserved: 28%
New Road Length: 6950 ft.	Road per lot: 330 ft. per lot	(36 acres out of 130)

Stevens Site: Erosion Prevention and Wildlife Habitat

Design overview:

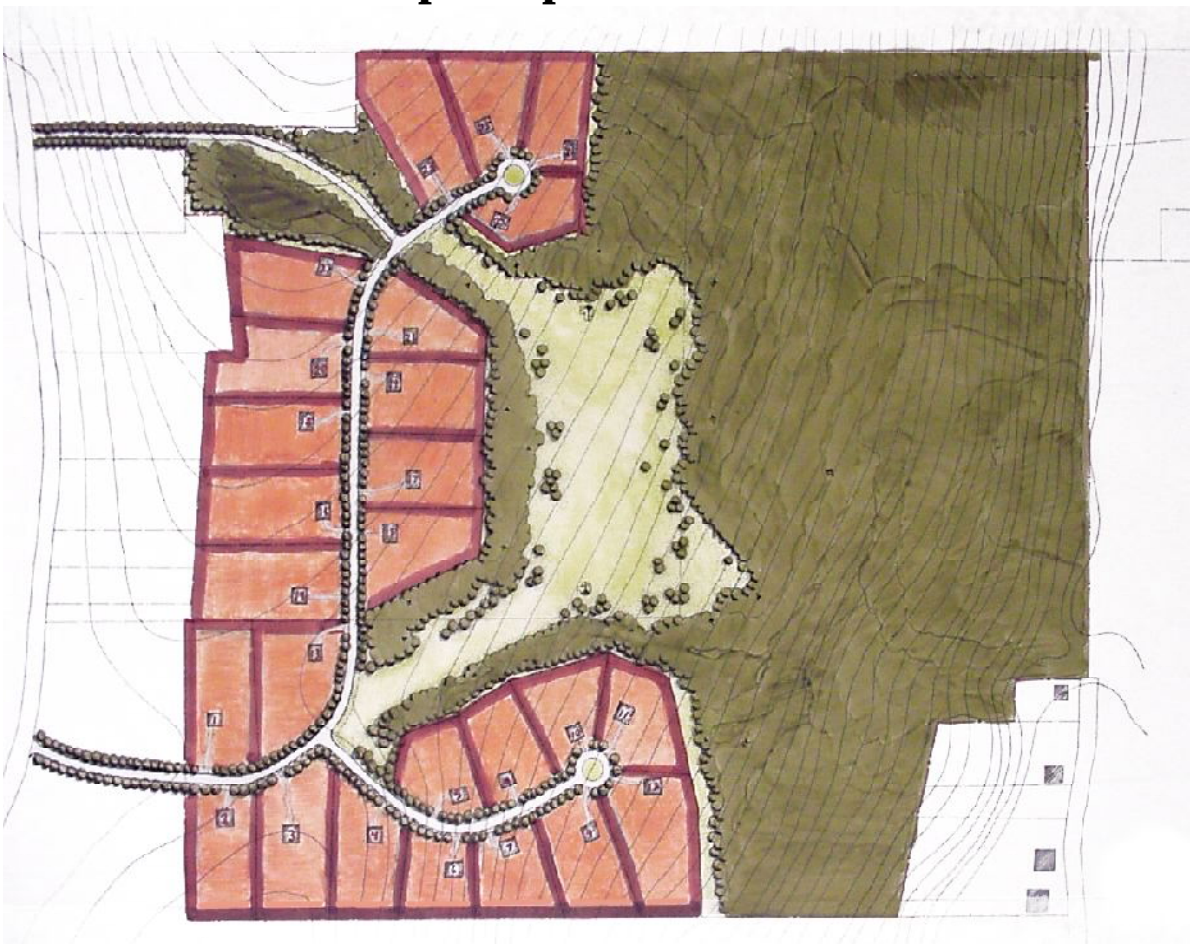
By building only on the upper portions of the site and minimizing intrusion into the forested areas, this design seeks to prevent erosion and lower costs. The value of the wooded land and the conserved open space of the old farm field is preserved and shared among the community through an extensive trail network which connects through shared access corridors to the street right-of-ways. Thus, despite the lower number of somewhat smaller lots, the value of the individual properties is maintained or increased by the access to natural amenities, and development costs are kept low through careful consideration of areas to build or protect.

Highlighted Incentives:

- Wildlife Habitat Incentives Program and Forestry Incentive Program support for the commonly-held open space amenity.
- Lowered road costs due to implementation of cul-de-sacs rather than loop roads (a trend toward Cluster Housing without that level of density).
- Conservation Easement benefits over the steeply sloped areas, where the costs of development would be prohibitive in any case.

Number of Lots: 16	Lot Sizes: 3.0 to 7.0 acres	% of Land Conserved: 53%
New Road Length: 4400 ft.	Road per lot: 275 ft. per lot	(69 acres out of 130)

Stevens Site: Shared Open Space and Wooded Buffer



Design overview:

Loosely reminiscent of the Garden City movement demonstrated in such towns as Radburn, NJ, this proposal separates the housing into smaller branches with access to a central open space. The privacy of lots along the open area as well as its park-like feel are both enhanced by the creation of forested buffer strips. This clearing then connects back to the woodland beyond it as well. Meanwhile, the narrower road frontage of the lots combines with the cul-de-sac approach to lower road costs per housing unit and to restrain development to the more buildable areas of the site.

Highlighted Incentives:

- Some of the clearing is left to managed growth to provide habitat through Wildlife Habitat Incentives Program funding.
- The reforestation of the buffer strips and the reclaimed farm fields can be accomplished with the assistance of the Forestry Incentive Program.
- Conservation easements over the open land ensure its protection from further development.
- Housing at this density with shared open space suggests a Homeowners' Association.

Number of Lots: 26	Lot Sizes: 1.0 to 2.0 acres	% of Land Conserved: 67%
New Road Length: 4800 ft.	Road per lot: 185 ft. per lot	(87 acres out of 130)

Stevens Site: Forest Extension and Hiking Trails

Design overview:

This dense development of small lots is separated into smaller branches by extensions of the wooded forest. Two purposes are served by these fingers of green: the visual impact of the density is mitigated, and the system of hiking trails proposed for the forested area is extended further into the development, enabling easy access for all the residents. Also, the small existing wetland is protected, extended, and connected to the network as a common amenity.

Highlighted Incentives:

- Woodland protection through the Forestry Incentives Program, and wetlands improvement funding through the Wetlands Reserve Program.
- Higher numbers of small lots whose value is boosted by easy access to extensive amenities and careful buffering from neighbors.
- A Homeowners' Association would likely be necessary to handle joint infrastructure costs, as the majority of lots would be difficult to site septic leach fields on.
- Tightly packed, smaller lots result in lower per-lot costs of roadway.

Number of Lots: 46	Lot Sizes: 1.0 to 2.0 acres	% of Land Conserved: 56%
New Road Length: 7400 ft.	Road per lot: 161 ft. per lot	(73 acres out of 130)

Stevens Site: Hedgerow Easements and Homeowners' Assoc.

Design overview:

The strength of this design comes from its protection of the site's unique character of farmland and woodland. The hedgerows themselves are protected by conservation easements, and supported by the connections of small paths along them which link them to the trail system in the woodland and the far field left to successional growth. The woodland's steep and less economically feasible slopes are thus reatined as a resource. A Homeowners' Association helps provide economies of scale for the cluster housing, and ensure shared responsibility for protecting the unique features of the site.

Highlighted Incentives:

- Conservation Easements protect all the important scenic features of the site and preserve the local character.
- Proper buffers around the cluster housing areas reduce the impact on neighboring areas.
- Forestry Incentive Program, Wildlife Habitat Incentives Program, and Wetlands Reserve Program funding helps provide support for the common areas and nature trails.
- Homeowners' Association links the cluster housing development together.

Number of Lots: 28	Lot Sizes: 1.0 to 3.0 acres	% of Land Conserved: 61%
New Road Length: 5200 ft.	Road per lot: 185 ft. per lot	(80 acres out of 130)