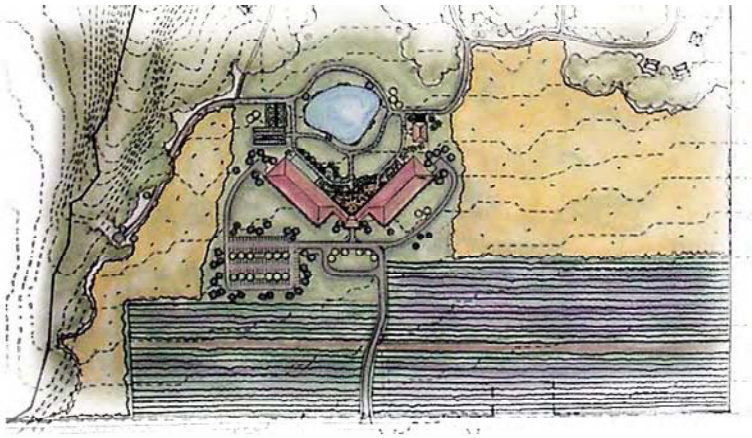
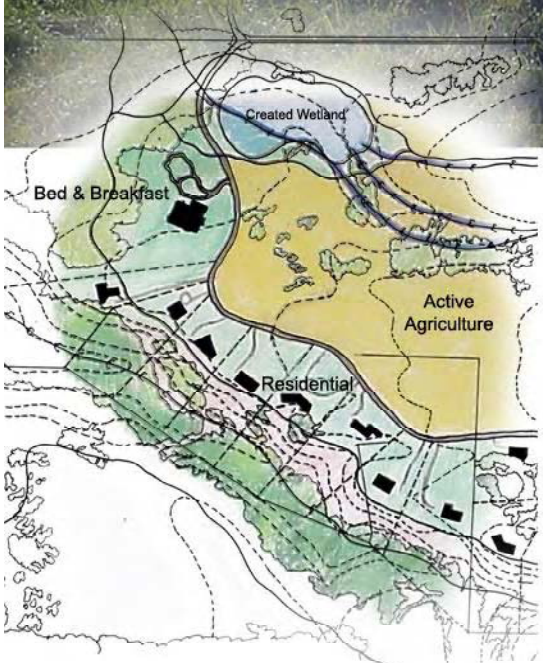


The
Rural Design Workbook:
Rethinking conventional development

A showroom of creative design solutions for real properties
that protect and preserve the rural environment,
with strategies, funding sources, and ideas
that can make it work for you and your community.



Southern Tier Central Regional Planning & Development Board
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Introduction

Welcome to the Rural Design Workbook!

This workbook is an easy-to-use collection of real-life development designs and recommended land use language for use by municipal planning boards as they review subdivision and site plan proposals. It has been developed by the Southern Tier Central Regional Planning and Development Board in conjunction with classes in Cornell University's Landscape Architecture program, and emphasizes design which promotes environmental health and conservation, preserves the rural character, and provides financial benefits or alternatives.

Audience and Goals of the Workbook:

This workbook is targeted at everyone involved in the planning and development process in rural land. Its goals are as follows:

- To use actual sites as examples of good design which is economically beneficial to the owner but protects the environment and water quality.
- To help landowners take advantage of environmental cost share and tax incentive programs which may make it "worth their while" to try a different approach to developing their land.
- To inspire local developers to design creatively.
- To give local planning boards the confidence to ask for (and get!) good design for their communities.

Organization of the Workbook:

CHAPTER 1 looks at **the problems facing rural communities** which are in the process of development; the ecological impacts, the loss of rural character, and the other consequences of the typical design approach will be addressed.

CHAPTER 2 describes **the four step "conservation subdivision" process** and the tools that planning boards and landowners need to develop a creative and sound design.

CHAPTER 3 lists the environmental stewardship **cost share programs and other financial incentives** to protect the land and water, and to promote better design.

CHAPTERS 4 AND ON are filled with **examples of these principles and programs in action**, based on real properties, noting benefits and cautions to keep in mind. Each chapter takes on a real property, performs a quick analysis of the site, and then looks at various student proposals for developing that land and the potential benefits of each.

The Appendices include the background of this Workbook and further information and definitions.

APPENDIX A: HISTORY OF THE WORKBOOK describes the development of this publication, including how we found willing landowners to work with the Cornell University School of Landscape Architecture, how the work was accomplished, and how area board members and developers responded to the Rural Design Showcase Presentations held at the end of each Rural Design Clinic.

APPENDIX B: OBTAINING MORE INFORMATION includes contact addresses or numbers for obtaining further information on each of the programs and incentives listed in the earlier chapters.

APPENDIX C: BETTER SITE DESIGN REPRINT contains a portion of a detailed analysis of open space design, reprinted with the permission of the Center for Watershed Protection.

APPENDIX D: PAINTED POST'S SUBDIVISION LAW is a portion of the subdivision regulations enacted by the Village of Painted Post, and is provided as an example of how design guidelines such as those proposed in the Workbook can be codified.

APPENDIX E: DEFINING A STREAMBANK explains what is meant, officially, by the term "streambank" in the context of the programs detailed in the Workbook, and gives a visual diagram of the extents of a bank.

APPENDIX F: RIPARIAN BUFFERS contains a portion of the Chesapeake Bay Program's "Riparian Forest Buffers," discussing these important transitional areas.

The workbook is designed in a modular, easily-expanded and easily-updated format. As new study sites are tackled or new funding sources become available, we will periodically release additional materials, which can then simply be added to the appropriate sections of the workbook.

We hope you use this booklet often. Direct landowners and developers to go on line at to get their own copies through the STC website (www.stcplanning.org). And please let us know if there is useful information which we have overlooked.

1: Why Do We Need Better Design?

Planning for the Future:

Whether we're excited about growth or not, the fact remains that the Southern Tier, like many other regions in the country, is changing. The region lost 55,000 acres of farmland in the decade between 1987 and 1997 to development or abandonment. Changing economic bases are bringing with them new residents and threatening our rural regions with suburbanization. With development comes an increased dependence on clean water resources, but also an increased hazard to them.

We couldn't stop this growth completely, even if we wanted to. But as we all know, growth isn't a bad thing, on its own terms. An expanded residential and commercial sector increases the tax base of the community. A larger population encourages diversity and community. Businesses bring jobs to the region. The problem we face isn't one of growth, but of the potential consequences of how we choose to accomodate that growth.

Most of those moving into rural regions in the Southern Tier express an interest in the "rural quality of life." As communities, landowners, developers, and planners, we need to take steps to ensure that those qualities are preserved. Frequently, however, zoning codes and design habits do little to help this. By rethinking our approach, we can save money, preserve the environment, protect farming as an industry which gives our region its flavor, and ensure that the "rural quality of life" will continue. A fresh approach to planning which encourages better design - that's what we mean by "Planning for the Future."

What's Wrong With Traditional Design?

The standard approach to developing, for example, a 100-acre former farm parcel into a residential subdivision has typically been to divide the land into about 50 parcels of about 2 acres each - the maximum density usually allowed under current zoning. These parcels generally end up evenly spaced, and laid out on the land with no consideration of what's currently underneath. Not only does this frequently lead to drainage problems with the soils, heavily sloped sites, expensive woodland clearing, and an unappealing overall "sameness" to the subdivision, it also destroys wildlife habitat, endangers stream corridors and aquifers, increases runoff and damage to infrastructure, and simply feels out of place in an otherwise rural setting.

Yet this is the approach that, while they don't explicitly encourage it, our current zoning codes seem to suggest. The problem is that the vast majority of rural communities have zoning ordinances which are based on a single model - one developed decades ago for suburban communities. What's needed is a new model: one that protects greenspace and wildlife habitat, encourages the preservation of farming, and enhances rather than detracts from the unique character of our region. The next chapter presents one possibility for that in detail, and explores variations on it that individual communities might make.

The Goals of Good Design:

- **To save taxpayers' money.** Our highway crews and Soil and Water District staff have better things to do than fix damage to streams and public property which could have been avoided in the first place. Chemung, Steuben, and Schuyler Counties have spent thousands of dollars fixing roads and bridges damaged by flash flooding and stormwater runoff. Some of this increase can be attributed to uncontrolled large lot housing developments on the steeper slopes, adding driveways and grading land, changing drainage patterns and increasing water levels. More thoughtful housing layouts can prevent this!

- **To maintain the rural quality of life.** An overwhelming number of rural residents want to "protect the rural way of life" when asked in surveys as part of the master planning process: 81% in Hornby, 95% in Lindley, 96% in Caton. 78% of Erwin residentssurveyed wanted zoning laws changed to protect open space and scenic views, and 66% of them are willing to pay for land or easements to preserve these qualities. There is clear support for fitting new homes and businesses into the landscape without destroying it for everyone else. Sensitively designed development can do this!

- **To protect stream corridors and watersheds.** Idyllic streams with a heron at every bend come to mind in the picture of a rural scene. Shaded, vegetated stream corridors are necessary to maintain stable stream banks, and to moderate water temperature, protecting fish and wildlife. Development too often clears these "buffers," degrading water quality and disrupting wildlife. Homeowners can still enjoy the sparkle of abrook or pond without water in their basements if good design methods are employed!

- **To keep farmers in business.** What would the "rural way of life" be without farmland? But farmers often need more income than their crops or animals can produce, and too many sell their land to pay the taxes. As mentioned above, our region has lost a substantial chunk of its farmland in recent years, and each encroaching development that conflicts with farming makes it more difficult for those who remain. Mixed-use designs, which plan for and incorporate agriculture into the overall picture for the area (or within the development), and alternative development strategies, such as easements or conservation-minded design, can be the "nest egg" that farmers need to keep their best land in production while capitalizing on the value of their other land for development.

- **To make financial sense.** All the good intentions in the world aren't always enough to overcome the "bottom line," and the first impression of many developers is that conservation-minded design is a tradeoff of financial value. The facts, however, are that when properly planned and executed, it isn't a financial loss at all; frequently, it can result in a substantial gain. Homes in conservation subdivisions, studies have shown, appreciate in value faster than those in conventional subdivisions, and there is often little or no connection between lot size and price; the *quality* of the space and the views and amenities surrounding the site (and protected by good design) are often worth far more than the land itself. Further, economic benefits can be realized from the very beginnings of a project: numerous sources of funding and incentives exist which can encourage good design; roadway and infrastructure costs are often lowered or better shared; and the resources needed to start the process are cheap - a roll of tracing paper and a pen, a site survey which is needed anyhow, and information which is available and free to the public, as you'll see.