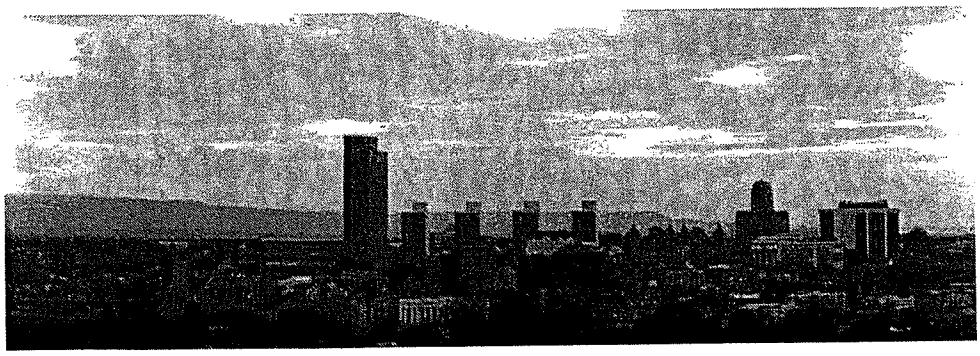
VIII. Aesthetics

The beauty of the Helderbergs is perhaps the overriding consideration related to land use in the Escarpment study area. The Helderberg region contains some of Albany County's most spectacular scenery, including Thacher Park, which attracts more than one-quarter million visitors annually. From many points along the Escarpment, one is afforded spectacular views of the Hudson Valley and beyond. Equally impressive are the views of the Escarpment's distinctive profile from the lowlands below the Escarpment. This dramatic view was clearly captured in the 1986 Albany tricentennial photograph, "Portrait of a City," which sets the skyline of downtown Albany against the backdrop of the Helderberg Escarpment. The viewpoint for that photograph appears to be from a hill northeast of downtown Rensselaer, but a similar view can be seen from Route 4, north of I-90, in Rensselaer County, an indication of the extensive area from which the Escarpment can be viewed. Even the term Helderberg, meaning "clear mountain," is an early Dutch reference to the striking visibility of and from the Escarpment.



Although aesthetic considerations are of great importance in the Escarpment area, aesthetic values are not easily protected through environmental and land use regulation. This is because aesthetic judgments are in part subjective and difficult to quantify, Nonetheless, it is necessary to do so in areas as aesthetically important as the Helderberg Escarpment.

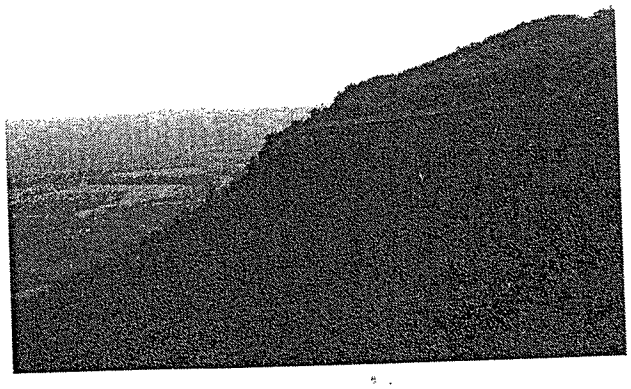
Under the State Environmental Quality Review Act (SEQRA), aesthetic resources are considered in determining the impacts of proposed projects. A "Visual EAF Addendum" accompanies the State's standard Environmental Assessment Form. The Visual Addendum invites an organized consideration of some visual and aesthetic aspects of proposed projects, providing some guidance in assessing the impacts of projects on visually important resources.

While SEQRA review provides an opportunity for local planning boards to influence the development process, SEQRA review is not required for much of the development that occurs in the Escarpment area. This chapter suggests an approach that can be used to

When negative scenic impacts are identified under SEQRA, these impacts must be mitigated to the maximal extent practicable.

minimize the negative impacts of development on the aesthetic quality of the Escarpment area.

Implementation of this approach may require zoning changes and public education.



Education is needed to encourage an ethic in the community which recognizes our relationship with and dependence on our natural surroundings, and which strikes a balance between the environment and economics. The very process of developing a scenic resource inventory, as recommended below, is an important educational exercise involving many members of the community.

Zoning changes may be needed to extend site plan review to a greater range of projects that may have visual impact in the Escarpment area.

The Escarpment is a scenic resource in part because it can be seen from a great distance across the Hudson-Mohawk lowland, and because it provides a commanding view of that lowland as well as the distant mountains to the north and east. It is a fragile scenic resource for the same reasons. Views <u>of</u> the Escarpment from the lowland can be compromised by changes on the Escarpment (e.g. adding prominent structures, or clearing large areas of vegetation), or by changes in the foreground that interfere with a view (e.g., overhead power lines). Likewise, views <u>from</u> the Escarpment can be compromised by changes in the lowland, or by changes in the foreground on the Escarpment. All four possibilities should be considered.

This chapter is organized as follows. First, a community must understand which scenic resources its residents and visitors value; Section A offers guidance on how a community can prepare a scenic resource inventory. A preliminary list of significant scenic areas is included in Appendix J. Second, a community must be prepared to protect those resources; Section B describes various criteria and principles that may assist municipal boards or developers in reviewing the aesthetic impacts of proposed developments. Section B begins by outlining the basic steps of an aesthetic review, and then examines a few practical applications.

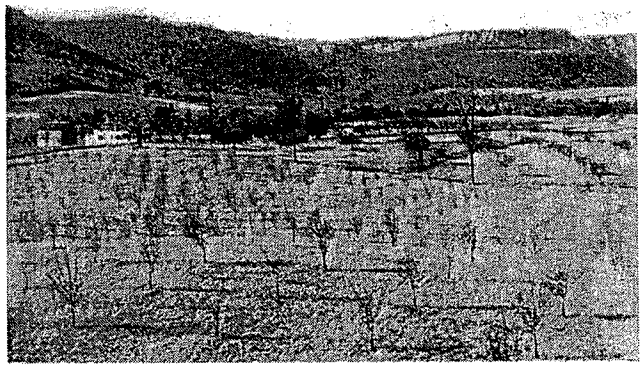
Views <u>of</u> the escarpment from the lowland can be compromised by changes on the escarpment, and views <u>from</u> the escarpment can be compromised by changes in the lowland.

A. Scenic Resource Inventory

Scenic resources generally fall into one of three categories: scenic viewpoints, scenic views, and scenic corridors. Each has its own characteristics and presents different challenges in maintaining the quality of the scenic resource.

Scenic viewpoint refers to a vantage point from which there is a scenic view; the view may include both nearby and distant objects. For example, one viewpoint on Route 156 near Voorheesville provides a view of an orchard in the foreground and the Helderberg Escarpment in the distance. Scenic viewpoints are most easily impacted by the introduction of objects close to the viewpoint that obstruct the view. Limiting the height of structures or vegetation near the viewpoint and having adequate setback requirements from the viewpoint can help minimize the impact that development near the viewpoint will have on the quality of the view.

Scenic view refers to the areas viewed from a viewpoint, for example, the orchard and the Escarpment in the previous example. As discussed below in Section B under Visual Analysis, the area in a view may be described more technically as a "viewshed." A scenic viewshed can be significantly impacted by development occurring within it. Antennas, buildings, outdoor lighting, and clearcutting along the edge of the Escarpment, for example, can be seen from great distances and detract from the quality of the view. Because viewsheds can include vast areas, controlling development to minimize visual impacts can be difficult. What may appear to be a minor development on a site-specific basis may have a significant impact on the viewshed within which the development occurs. With regard to views of the Escarpment, limitations on placement of antennas, buildings, outdoor lighting and clearcutting can significantly minimize future deterioration of the quality of views.



Indian Ladder Farm and the Escarpment, 1927
(Photo courtesy of the N Y S Museum Photo Archives)

Scenic corridor generally refers to a travel corridor, a length of road that provides a series of closely spaced viewpoints along its length. In addition to corridors offering views of distant areas, heavily wooded travel corridors are also considered to be scenic resources, offering vistas having qualities and characteristics associated with undeveloped wilderness areas. A scenic corridor can be impacted by development along its length that is discordant with the prevailing scenic quality of the corridor.

The Committee has prepared a preliminary inventory of scenic resources in the study area. These include scenic views, viewpoints and corridors above and below the Escarpment in the towns of Berne, Knox, Guilderland, and New Scotland, both within and just outside the study area. These scenic resources are listed and described in Appendix J.

This preliminary inventory is meant to serve as a starting point for municipalities in the study area as they begin to conduct more comprehensive inventories.

The preliminary inventory can also serve to identify for developers, municipal officials, and local boards some areas that merit special aesthetic concern. If a development is proposed in such an area, the environmental review process for the development should include an aesthetic review.

Most visual assessment professionals agree that an individual, or even a small group, cannot make valid visual judgments in isolation. Visual assessment of the countryside is so intertwined with cultural interpretations that it is difficult, even for trained observers, to act as surrogates for the public in rating the landscape. The public should be the key player from the beginning; in preparing a visual assessment for community planning, the widest possible participation of residents is needed (Schauman, 1986). A step-by-step procedure for involving the public in visual assessment is described in a report on the North Shore Design Project by the Tug Hill Commission (1990).

Hopefully the inventory will act as a challenge to local residents and municipal officials to identify the scenic and aesthetic resources that are important to preserve.

In determining whether to include a candidate scenic resource in the final inventory, it may be useful to have a semi-quantitative tool to help the participants consider the full range of relevant factors. For that purpose, we include below criteria adapted from a procedure used in Yates County to evaluate and identify scenic resources (Trancik, 1990); a similar approach is described in Rural Environmental Planning (Sargent, 1976). Yates County is a rural county, surrounding the northern half of Keuka Lake in the heart of the Finger Lakes region of New York State. The Yates County Guide also includes a comprehensive inventory of scenic resources in that county.

- Quality of the view or vista from a viewpoint or travel corridor (Rating scale: low scenic value ----- high scenic value).

- Exposure (How often and by how many people is it viewed?) (Rating scale: viewed infrequently ----- viewed often).

- Uniqueness of landforms (plains, hills, valley, escarpment, etc.) (Rating scale: common ----- very unique).

- Uniqueness of landscape elements (water, fields, forest, road, etc.)
  (Rating scale: ordinary ----- rare).

- Countryside structure (Is the view representative of the area?)
  (Rating scale: not very characteristic ----- highly characteristic).

- Scenic resource meaning (history, symbolic value, educational value)
  (Rating scale: low significance ----- high significance).

- Fitness (human care and maintenance vs. dereliction)
  (Rating scale: impacted ----- pristine).

- Fragility (the capacity of the resource to absorb visual change)
  (Rating scale: high tolerance ----- low tolerance).

In determining which scenic resources to include in Appendix J, the Helderberg Escarpment Planning Committee tried quantifying these criteria in various ways. One useful scale is to simply define a scenic resource as Moderately Valuable if it scores high in one or two of the above criteria, Valuable if it fits 3 or 4 of the criteria, or Extremely Valuable if it fits 5 or more of the criteria.

As an illustration of the use of this scale, consider the view to the west from a point on Picard Road about 0.3 miles south of the intersection with Route 156. This is a close-up view along the front of the Escarpment face, presenting the Escarpment face as a series of layered ridge profiles descending from left to right, with a field in the foreground and a house set well back into the distant foreground, but with power lines (local distribution lines) in the foreground.

This would be classified between "valuable" and "extremely valuable," as it scores strongly on four criteria: high scenic value, unique character, rare landscape elements (the layering), and highly characteristic countryside structure. Exposure is moderate (Picard Road is a county highway). Scenic resource meaning is low. In addition, the view is somewhat impacted by power lines.

From Picard Rd., early evening

Obviously, fragility is an important planning consideration, since it relates to the sensitivity of a site to alteration by development. A site such as the Picard Road scenic viewpoint has a rather low capacity to absorb visual change (particularly in the foreground). Placing a structure in the foreground, or even tall vegetation, would virtually eliminate the value of the viewpoint for the general public from the highway. It should be noted that this view is open because the land in the foreground has been used for agriculture.

B. Aesthetic Review

Aesthetic review is a complex combination of quantitative and qualitative considerations. Municipal boards conducting site plan reviews for projects within the study area should find this section particularly helpful. It presents a detailed outline of the three major parts of an aesthetic review: the mostly quantitative Visual Analysis; the more qualitative Aesthetic Analysis; and the analytical consideration of Mitigation Alternatives. This is followed by summaries of practical recommendations found in other reports that describe the application of aesthetic review to projects in other parts of New York State. The recommendations presented in these other reports are, to a large extent, transferable, and have been adapted to the Helderberg Escarpment study area.

General Principles of Aesthetic Review

Under SEQRA, aesthetic resources are considered in determining the impacts of proposed projects.

The following is adapted from Aesthetics Handbook, by R. Benas, a draft New York State Department of Environmental Conservation document intended as a set of general guidelines for the review of aesthetic impacts of a proposed project under the State Environmental Quality Review Act. Some examples relevant to the Study Area have been incorporated into the adaptation.

Benas suggests that the aesthetic review of a proposed project be organized into three stages—visual analysis, aesthetic analysis, and an evaluation of mitigation alternatives.

Visual Analysis

- Viewshed analysis. This is a topographic analysis that seeks to locate the area from which a proposed project can be seen. It also defines the reciprocal relationship—the area that can be seen from the project (or from a viewpoint). The analysis can be done automatically using specialized computer programs. The analysis generally considers such things as the height of the viewer, but may not adequately consider whether nearby trees or structures block the view.

  Once a community has a scenic resource inventory, a viewshed analysis helps to identify which scenic resources may be impacted by a project. Viewpoints or corridors that lie within the viewshed of a project should be studied more carefully.

- Visibility. This involves deciding at what distance a project is no longer of significance, or discernable, in the field of view. Visibility is primarily a function of the acuity of the human eye, given the size and shape of the project and the amount of contrast between the project and its surroundings. For example, a house constructed on the top of the Escarpment might be easily seen at 1 mile from the base, but would be essentially invisible from 15 miles away.

A 70-foot wide by 50-foot tall, white wedding tent erected in Glen Doone Picnic Area, Thacher Park, in the summer of 1994 showed how significant a structure can be when placed near the edge of the Escarpment. Normally, objects in Thacher Park are not noticeable from below the Escarpment. However, this tent, because of its size and contrast, was striking in its visibility from points within a mile or two.

Another example is the Northeast Industrial Park in Guilderland Center; it is clearly visible from the Escarpment because of its contrasting color and its size, and because it introduces a strong linear element in an otherwise patchwork landscape.

Projects visible from Thacher Park are seen by over a quarter million visitors each year.

- Exposure. Exposure means the extent to which the project will be seen by people. In the case of projects visible from Thacher Park, the exposure can be estimated by the number of visitors the park receives each year (over a quarter million per year), since the main attraction of the park is the views. In the case of projects on the Escarpment, it is more difficult to define the exposure accurately. One could use traffic data on highways (such as Depot Road, Relyea Road, Route 156, Route 85A south of Voorheesville) that have a good view of the Escarpment. Or one could simply use the population of the viewshed.

- Context. This has to do with the degree to which the proposed project will be significant to those in the viewshed. For example, an antenna located at High Point above Altamont is likely to be considered objectionable by all viewers of the Escarpment, since it would be the first highly visible man-made object on the top of the Escarpment in that area. On the other hand, another antenna in the "antenna farm" at Pinnacle would likely have relatively little visual significance.

  Context also relates to the human activities occurring when exposure to the project takes place. For example, if a particular project impacts the view only at the intersection of Route 85 and Route 157, then one could argue that most potential viewers would be so distracted by the task of driving that they would have little opportunity to appreciate the view at that location anyway.

Aesthetic Analysis

- Landscape quality. Landscape quality relates to the aesthetic significance of the view. Benas suggests that this can be left to experts, for example, trained landscape architects who use empirical rules about landscape features and their combinations to judge whether a particular view would likely be important to the community and other observers.

  Equally valid is the psychometric or social science approach, which involves groups of citizens in identifying and judging the value of various views (as is recommended above in the section on Scenic Resource Inventory).

In an administrative hearing, the fact that a scenic resource is listed in a local scenic resource inventory would be *prima facie* evidence of the quality and significance of the landscape.

- Project compatibility. This is a judgement of the extent to which the project is or is not compatible with existing resources of aesthetic significance. For example, placing a housing development on Meadowdale Road would have less significant impact on viewers from Thacher Park than placing a complex of glass and aluminum office buildings on the same size parcel in the same place. Project compatibility can be judged by an expert or by a group of citizens.

- Cumulative impact. A series of small, related developments (for example, the subdivision of one or two building lots at a time) can eventually cause visual saturation. While the aesthetic impact of each project considered by itself may be modest, the cumulative impact can be significant. SEQRA, 6 NYCRR 617.11, requires the consideration of cumulative impact.

Mitigation Alternatives. When negative scenic impacts are identified under SEQRA, those impacts must be mitigated to the maximal extent practicable. Benas lists several types of mitigation that might be considered:

Two brown houses, viewed from Thacher Park

- Screens or visual barriers.
- Aesthetic offsets. This means, trading a deterioration of aesthetic value in one place for an improvement elsewhere. An example might be a highway widening which involves the destruction of trees in the right-of-way, but which is mitigated by burying overhead power lines which are near but not in the right-of-way.
- Decommissioning. Eliminating unattractive structures that detract from the aesthetic value of a landscape.
- Alternative siting. For example, from an aesthetic point of view, the proposed Bechtel power plant would have been far better placed in the industrial park in Rotterdam than in Guilderland Center, where it would have been in clear view of the Escarpment.
- Camouflage. For example, use of architecture to make the structure blend into its surroundings.

Recommendations for Aesthetic Review

The following is adapted from Preserving the Scenic Views From the Northern Ridge of the Shawangunk Mountains, by George Tukel and Stephen Yarabek (1988). This

document presents recommendations useful in analyzing the scenic impacts of proposed development in areas below the Escarpment. The northern ridge of the Shawangunk Mountains is an escarpment, similar in many respects to the Helderberg Escarpment.

The authors suggest that, during the aesthetic review process, planning boards pose the following questions:

- Is the proposed development project visible from the trails along the Escarpment; and to what degree is it visible?
- Does the project have aesthetic impact? For example:
  - Does the proposed project (by itself or when combined with other projects) clutter the general field of view?
  - Is the proposed project consistent with existing land-use within the general field of view?
  - Does the proposed project complement the existing character of the general field of view?
- Is there a need for further study (in the form of an Environmental Impact Statement) to mitigate the aesthetic impact?
- How is it best to organize the EIS? First organize a reliable information base by completing a visual analysis of the proposed project that contains, at least the following elements:
  - Visibility and exposure
  - Graphic simulation
  - Contrast rating
  - Viewsheds
- Boards reviewing site plans should then make use of the information base by analyzing all reasonable choices to reduce aesthetic impact. These include, but are not limited to the following
  - Reduce the visibility of the proposed project by removal, screening or camouflaging, and
  - Utilize landscape, architectural and land-use elements which, when designed together, complement the existing general field of vision.
- What is the best way to document the aesthetic review to demonstrate that all has been done to minimize aesthetic impact? Make a finding, using the visual and aesthetic analysis as a framework, that clearly shows how design and reduction of visibility have been used to reduce aesthetic impact to the greatest extent possible.

As an illustration, the report by Tukel and Yarabek includes a case study of a farm to be subdivided in the Town of Gardiner that is clearly visible from trail point overlooks in Minnewaska State Park and Mohonk Preserve. Surrounded by forest and agricultural land, the farm, with its houses, barns, sheds and silos, is divided into different fields by rows of trees, stone walls, waterways and wetland areas.

Sold for residential use and developed unimaginatively, without regard for aesthetic considerations, the farm would likely be divided into a "cookie-cutter" arrangement of contemporary houses on uniform-sized lots and suburban roads. Such a subdivision

would contrast sharply with the surrounding rural landscape and effectively downgrade the aesthetic experience of the view from the important overlooks above.

It should be a common goal to minimize aesthetic impact.

A similar situation is easily imagined below the Helderberg Escarpment, where insensitive development could adversely impact the view from Thacher Park or High Point.

It should be the common goal of developers, planners and citizens, and it would be the legal responsibility of the planning board, to reduce the contrast between the subdivision and its surroundings to the point that minimizes aesthetic impact. This could be accomplished by integrating an intelligent mix of subdivision concepts, siting decisions, architectural choices and landscape design. (Also see the section below on Conservation Design.)

For example, in the most visible areas of the farm, a commitment can be made to large lots, essentially maintaining an uncluttered landscape. By encouraging the appropriate choice of color for roof and facade, by siting on gentle slopes so landscaping can produce screening, or by earth sheltering, the visibility of single houses can be substantially lowered. One could also entertain the possibility of keeping these parts of the farm in production through leasing to farmers, or by creating enterprises such as horse farms.

Private roads would be a viable option here. While lowering the developer's upfront capital costs, private roads would be smaller, less visually intrusive and more in keeping with a rural setting. With sensitive landscaping, or by making use of existing hedgerows, roads would appear like tree-rows or hedgerows that are common to the area.

Recommendations for Mitigation

The following is adapted from Yates County Looking Ahead: A Planning and Design Guide, produced by the Yates County Office of Economic Development in 1990. This study, particularly the chapter "Design Principles into Practice" presents a variety of planning principles that may be applied to mitigate the visual impact of developments in the Helderberg Escarpment area.

- Take advantage of natural terrain.
  - Be sensitive to drainage patterns, vegetation, views, wind and sun exposure.
  - Minimize cut and fill.
  - Don't clearcut.
  - Roads should parallel contours.
  - Long, roads should be curved for privacy.
  - Avoid cul-de-sacs.

- Place structures on flanks of hills, rather than crests; "tuck away" new structures so they don't dominate or interfere with views; build into tree cover, rather than in the middle of open space. Trees filter the visual presence of structures and enhance the visual compatibility with the surrounding rural landscape. New development located

in the middle of an open field consumes open space on the site, blocks views, and has little visual relationship to the surrounding rural landscape. (See Figure 8-1).

Appropriate use of existing trees can, in addition, make a home more energy efficient by shading the home in summer and shielding the home from wind in winter. (See Figure 8-2.)

- When siting a number of structures on a sloping site, stagger their placement to prevent obstructing views.

- Cluster new homes to prevent visual monotony and sprawl, and to preserve open spaces.

- Provide a central "village green" in new development to provide a focus of common open space.

- Utilize existing roads as much as possible; when new connector roads across agricultural parcels cannot be avoided, establish hedgerows along the roads (and along lengthy driveways).

  Judicious placement of roads and driveways with respect to hedgerows can also minimize the amount of snow removal required (Mellor, 1965).

- Architecture should follow a common theme and reflect scale, profile and massing similar to existing structures; avoid use of forms, colors and materials that are alien to the surrounding landscape.

- New plantings should be a mix of native species; establish tree plantations and orchards to interrupt continuous development; incorporate new plantings as buffers.

- Place utilities underground—nearly every view of the Escarpment from below is already impacted to some degree by overhead power lines.

- Often there will be a conflict between the developer's desire to have a superior view, and the public's desire to minimize the visual impact of the developer's building—if the building has a great view, then it is potentially visible. In such a conflict, camouflage, by the use of siting, architecture, screening, and choice of building materials, becomes of central importance.

In fact, some screening vegetation can enhance a homeowner's view. Vegetation in the foreground (near the home) frames the view, providing visual variety and a sense of scale (similar to the effect of the moon looking larger when it is near objects on the horizon).

Conservation Design

Conservation design is an approach to subdivision design promoted by Arendt (1996). The basic idea is to design the subdivision around the environmental resources on the site (agricultural land, historic or scenic views, significant tree stands, wetlands, steep slopes) rather than starting from the area and setback regulations applicable to typical subdivisions.

Conservation design may be viewed as an intelligent approach to clustering. The process begins by determining the number of allowable lots based on the existing zoning regulations (after subtracting land that is unbuildable based on Health Department guidelines or subdivision regulations). Once the number of lots is determined, homes and roadways are located so as to respect as much as possible the environmental resources of the site. Lot lines are drawn only at the end.

> The idea of conservation design is to design the subdivision around the environmental resources on the site.

Arendt (1996) is a useful source of guidance for this approach to subdivision design. Using this approach, subdivisions can be named for the resource they protect rather than for the resource they destroy (which seems to be too often the case).

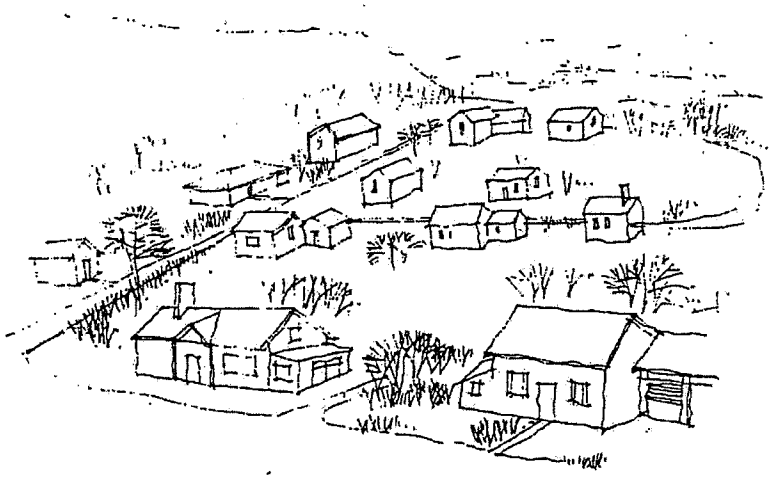


Figure 8-1 New Development That Does Not Respect the Rural Landscape.

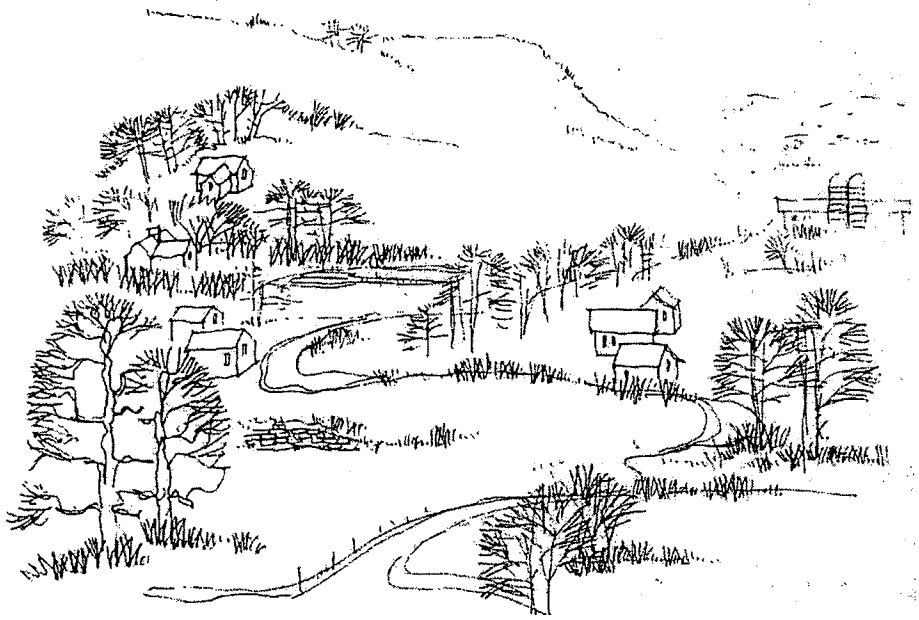


Figure 8-2 Development With Common Open Space, Using Mature Trees For Shading And Wind Protection.

C. Recommendations

This Chapter makes the following main recommendations.

- Scenic resource inventory. Municipalities should develop a scenic resource inventory of scenic views, viewpoints and corridors that the residents of the municipality deem valuable. This should be accomplished with as broad a public participation as possible.

- Zoning for scenic areas. Town and village boards should consider amending their Zoning Laws to include site plan review for development in significant scenic areas, and appropriate controls (e.g. on clear cutting) for particularly sensitive areas. They should also consider allowing (or, at the discretion of the Planning Board, mandating) clustering of development in order to give developers, designers and review boards greater flexibility of design.

- Aesthetic review. Municipal boards that review site plans in the study area should include aesthetic criteria in their site plan review, and work with developers to identify and mitigate any adverse aesthetic impacts, including cumulative impacts, to the maximum extent practicable.

D. References

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