
LAND USE PLAN ELEMENT

(Adopted April 23, 2007; Reorganized February 25, 2008, Amended November 27, 2017)

INTRODUCTION

This Land Use Plan is designed to implement the overall goals and objectives of this Master Plan. It is the core element synthesizing all of the other elements. It provides the legally required prerequisite for the adoption of the township's zoning and land development regulations, providing the rationale for those regulations.

This Land Use Plan is influenced by the extent and character of publicly owned lands within the township that have regional and national significance, the Great Swamp National Wildlife Refuge and the Morristown National Historical Park. It is also greatly influenced by the sensitive environmental features found throughout Harding Township and the desire to preserve the township's historical and rural residential development pattern. Its primary goal is to perpetuate the township's long-established planning efforts to preserve environmental and historical resources and its traditional rural development pattern.

This Land Use Plan is organized into six sections as outlined below. Three maps included at the end of the Master Plan illustrate existing land uses, established lot patterns, and the future land use plan.

1. Land Use Objectives describes the principal objectives that should guide development in Harding.
2. Milestones in Land Use Planning in Harding provides a detailed background of the history of land use planning in Harding.
3. Principles and Assumptions that should Guide Future Development Policies details the philosophical foundation for the Land Use Plan.
4. Established Land Use and Development Patterns describes in detail the principal elements that contribute to Harding's rural character.
5. The Future Land Use Plan describes the land use policies that should apply to each zoning district and that should guide future development in the township.
6. Special Considerations for Future Development contains a description of policies that should apply to special land uses or areas, including redevelopment strategies, the protection of critical areas, and creative development techniques for subdivisions.

LAND USE OBJECTIVES

Land use and development policies in Harding should be guided by the following objectives. They should be used as an overall guide for evaluating existing development policies and in considering ordinances intended to implement this plan.

1. **Preserve and perpetuate the township's rural historic character and high quality natural environment.** Preserving the township's traditional historic and rural character is a central objective of this Master Plan. Preserving the narrow, curvilinear road system bordered by large trees and open fields is fundamental to achieving this. Roads constructed to serve new development should replicate appropriate characteristics of the township's existing roads and landscapes. Creative development techniques should be employed so that subdivision layouts promote the township's rural character by establishing variety in lot sizes, preserving the rural streetscape, and maintaining open fields, natural vegetation and mature trees, and bridle trails.
2. **Protect water resources.** Future development should be limited and regulated so as not to substantially diminish the quality of the township's ground and surface water resources, particularly in view of the township's function as a recharge area for the Buried Valley Aquifer and its location in the Highlands Region. Conservation easements should be established along stream corridors to protect surface water quality and promote greenways.
3. **Protect the Great Swamp National Wildlife Refuge.** New development should be designed to minimize stormwater runoff in the Great Swamp watershed, consistent with this Master Plan's and the State Development and Redevelopment Plan's policies to protect environmentally sensitive areas.
4. **Protect Morristown National Historical Park.** The historic integrity of Morristown National Historical Park should be protected from the negative effects of development.
5. **Preserve the township's historic heritage.** Public and private efforts to save historic structures should be encouraged and new development in or near historic districts should be undertaken in ways that will preserve the historic character of these areas.
6. **Maintain New Vernon as the center of community interaction and focal point for the community.** Future development/redevelopment policies should promote the continuation of the village of New Vernon as a focal point and gathering place for the Harding community. The pedestrian scale of the village with small-scale commercial uses, banks and professional offices, surrounded by low-density residential uses should be maintained. The reestablishment of the Post Office in the village core has been essential to this objective.
7. **Perpetuate the established patterns of development.** The zone plan should reflect and perpetuate established land uses and lot patterns, and manage development compatible with the established low residential density and the small scale and limited extent of commercial development.
8. **Balance development with limited infrastructure.** Future development should be limited to levels that can be supported without substantially improving or expanding the existing limited public infrastructure.

MILESTONES IN LAND USE PLANNING IN HARDING

This Land Use Plan is the result of a long evolution of formal land use planning in Harding, which began on November 1, 1928 with the New Vernon Neighborhood Restrictive Agreement. This

agreement among private landowners of large estates established protective covenants against subdividing into less than three-acre residential lots throughout the New Vernon area.

The original township Zoning Ordinance, adopted on December 9, 1930, provided for the first regulation of land use development with the creation of two residential zones and a limited business district. Other early milestones in Harding's planning and development include the creation of the Mt. Kemble Lake community in the late 1920s and the establishment of Morristown National Historical Park, the nation's first historical park, in the early 1930s. In the 1960's the Great Swamp National Wildlife Refuge was established and now serves as an important regional environmental resource.

Much of the township's historic rural development pattern has been retained despite rapid suburbanization that took place in northern New Jersey after World War II. Through the years, the Land Use Plan and development regulations have been updated to reflect changing circumstances, such as the construction of I-287. However, the community's desire to preserve and protect the township's environmental resources, rural development characteristics, and regionally significant public open space areas has remained constant.

Over the last 25 years there has been increasing local, regional and statewide concern about damage to environmental resources and the consequences of suburban sprawl. In 1980 the New Jersey Department of Community Affairs recognized Harding's special land use and environmental characteristics by designating most of the township as a Conservation Area in the State Development Guide Plan. In 1989, the Commissioner of the New Jersey Department of Environmental Protection signed Administrative Order # 51 creating the Great Swamp Watershed Advisory Committee to make recommendations for the protection of the watershed. Subsequently the Ten Towns Committee was established to prepare a watershed management plan, accomplished in 1997, recommending land use policies to protect the Refuge.

In 1992, and again in 2001, the New Jersey State Planning Commission designated virtually all of Harding as part of the Environmentally Sensitive Planning Area (Planning Area 5) in the New Jersey State Development and Redevelopment Plan ("State Plan"). The State Plan embodies planning policies to promote sustainable growth in appropriate areas, protect natural resources and avoid sprawl, and guide state agencies in allocating funds and approving projects involving the expansion of infrastructure.

In 2000, the Planning Board conducted a reexamination of the Master Plan and development regulations and concluded that Harding's rural character was at risk due to full development in some areas under the R-1 Zone's 3-acre minimum lot size. The report noted that there were still areas where full build-out had not occurred and that the number of oversized lots and the variety of lot sizes in these areas contributed significantly to the township's rural character. The report recommended a study utilizing the township's Geographic Information System (GIS) to analyze areas where it would be appropriate to lower the development density based on established lot patterns and/or the presence of environmental constraints.

In 2003, the Master Plan was amended to update the Environmental Resources Inventory (ERI). The new ERI recognized the significance of Harding's water resources and recommended that a carrying capacity study be conducted to analyze the capability of soils to accommodate development that is reliant upon individual wastewater disposal systems. The study, undertaken in early 2004 by Maser Consulting Engineers, utilized the "Nitrate Dilution Model" to recommend appropriate development densities consistent with Harding's long-standing environmental protection goals. It also recommended a review of the township's zoning densities to determine if they were consistent with the conclusions of the study under full "build-out." These recommendations, which are further discussed in detail in the Conservation Plan element, have significantly influenced future land use policies embodied in this Plan and the zoning amendments enacted in November 2004 that established a new low density residential district in the township.

PRINCIPLES & ASSUMPTIONS THAT SHOULD GUIDE FUTURE DEVELOPMENT POLICIES

Following are the primary principles and assumptions that should be taken into account in formulating and implementing future land use policies in Harding Township.

State planning area designation: environmentally sensitive. The State Development and Redevelopment Plan first adopted in 1992 and readopted in 2001 designated virtually all of Harding as Planning Area 5 (PA-5), Environmentally Sensitive. The planning policies recommended in the State Plan for PA-5 areas are designed to protect critical environmental resources and discourage intense development (except in designated centers) necessitating extensions of infrastructure into environmentally sensitive areas. Consistent with this, the NJ Department of Community Affairs (DCA) has designated Harding a *Special Area* permitting modified stormwater and subdivision road improvement standards in recognition of Harding's location within the Great Swamp watershed and local and state environmental planning goals.

Highlands Region. The western section of Harding is located within the physiographic region known as the *Highlands*. Under the Highlands Water Protection and Planning Act all of Harding is included in the Highlands Region *planning area*. The protection of water resources in the Highlands is of regional and statewide importance.

Great Swamp National Wildlife Refuge. About half of the Refuge is located within Harding Township and almost all stormwater runoff from development in the township flows into it. The township has a special responsibility to protect the environmental quality of the Refuge.

Morristown National Historical Park (Jockey Hollow) and Historic Districts. Harding includes almost all of the Morristown National Historical Park and six historic districts, three of which are state and nationally registered districts. In addition, there are numerous other historic resources around the township that are not within the boundaries of designated historic districts. The township has a responsibility to promote the preservation of these important resources that contribute significantly to the nation's history and the township's character and sense of place.

Limited public infrastructure. Harding has a system of narrow roads and only small areas with access to public water and sewer systems. Substantial expansion or improvement to this infrastructure would be inconsistent with Harding’s designation within Planning Area 5, the environmentally sensitive planning area. Thus, future development must be in balance with the ability of the land to support it.

Groundwater quality and supply. The connection of Harding’s groundwater to the Buried Valley Aquifer system and the reliance of most residents on wells for their water supply make the protection of groundwater quality of primary importance.

Preservation of the traditional rural development pattern. Since the creation of the New Vernon Restrictive Agreement in the 1920s, Harding’s fundamental planning goal has been to preserve its rural character and historic heritage. This remains a strong desire of current residents.

Commitment to provide affordable housing. The zone plan should reflect the township’s commitment to meet its affordable housing obligation in a manner consistent with the goal of preserving the township’s traditional development pattern.

Critical areas and areas with special natural resources. Development pressures are endangering areas of critical environmental importance and natural resources of special significance in the township. These critical areas and special natural resources such as stream corridors, freshwater wetlands, flood hazard areas, steep slopes, and mature woodlands, deserve special consideration.

ESTABLISHED LAND USE & DEVELOPMENT PATTERNS

This section of the Land Use Plan describes the primary elements of the major existing land use patterns in the township. Figure 17, Existing Land Use map, shows the patterns of existing land uses in Harding. Harding’s landscape has traditionally been highly organized around compact, relatively high-density crossroad villages surrounded by a relatively low-density countryside. To a great extent, the overall pattern is one of significant variety in the size and shape of land holdings and of the buildings located on them, whether in villages or the countryside. This contrasts sharply with the uniformity and homogeneity that is characteristic of modern suburban development elsewhere in the region.

Development History

The history of development in Harding Township is inextricably linked with the diverse geography of the township. Early settlement in the township occurred along the historic Indian trails which extended through forests, along the limited, dry terrain in the southern portion of the township, along the plateaus in the central portion of the township and through the valleys in the northwestern portion of the township. From the time of the first European settlement, to the Revolutionary War, the township was sparsely populated. A few mills, forges, and taverns

served the scattered rural dwellings. Harding Township experienced a period of growth between the Revolutionary and Civil wars. The earliest architecturally significant building activity took place in the 19th Century along Mt. Kemble Avenue. It was then that the Glen Alpin and Hurstmont houses were built.

Harding was largely unaffected by later industrialization and, despite explosive growth elsewhere in northern New Jersey, the township's more rural development pattern has been maintained throughout the 20th Century. The result has been the preservation of large areas of open land and protection of sensitive environmental features within the township. In the 1920's, five large landowners in Harding recognized that intensive development would destroy the environmental resources and rural character of the community, and on November 1, 1928, entered into the "New Vernon Neighborhood Restrictive Agreement" which established protective covenants preventing the resale of land in units smaller than three acre residential lots throughout most of the township. During the same period, the federal government acquired large tracts of land within the township to establish the Morristown National Historical Park.

Little development occurred in Harding from the 1920's to World War II with the exception of a small pocket of summer home development around Mt. Kemble Lake. New housing was interspersed with the old and was compatible in scale and mass to the earlier development. Commercial development was limited to the Route 202 corridor and to a small village store and service station in New Vernon. Following World War II, the rural pattern of residential development continued throughout most of the township. Smaller lot development occurred along the northern border of Harding along Route 202, in the New Vernon area, in the Green Village area at the western end of Pleasantville Road and in the Mt. Kemble Lake area where summer homes were converted into year round residences and new year round houses were built.

In the late 1970's and early 1980's, two townhouse developments were built at the northern edge of the township along Route 202. The only significant non-residential development to occur in Harding Township has been restricted to a narrow highway corridor along Route 202, west of Interstate 287. In recent years, two utility maintenance facilities, two corporate office structures, and a number of small business facilities have been constructed in this area.

Harding's Rural Character

The land use pattern that still persists in many areas of Harding is characteristic of historic rural America. Harding's historic rural development pattern is that of a landscape of low-density development organized around several small crossroad villages. In many areas, the great variety and randomness of lot sizes, including the numerous very large lots that still exist, distinguish it from typical modern suburbia, which is characterized by a pattern of uniformity in lot size and development layout.

Harding's rural character is defined by the combination of characteristics that contribute to what we think of as the rural landscape. While each element alone might not be sufficient to identify

the community as *rural*, the combination of these elements is evocative of a rural setting. The essential contributing elements of Harding’s rural character are:

- **Compact villages versus open countryside.** A compact village with visually defined boundaries surrounded by open countryside is the essential pattern of the rural community, i.e. a pattern of sharp contrast between densities and the variety of lot patterns and “openness” found in the surrounding countryside.
- **Contiguous large areas of open space.** The Great Swamp and Jockey Hollow isolate Harding from the more intense development of the region.
- **Established low-density pattern of development.** An overall low-density development pattern is fundamental to rural character. In areas where large vacant or underdeveloped lots prevail, more of the natural vegetation and woodlands remain undisturbed. There may be long vistas over meadows or farm fields, with a few modest-size and/or historic dwellings or barns dotting the road or, in some cases, set back very far from it. In areas where full development under current zoning has occurred, this element has been diminished.
- **Views of undeveloped land from public roads.** What is visible from public roads defines what we think of as the character of a community. The large amount of vacant or significantly underdeveloped land visible from public roads is a major contributing factor to the township’s rural character. The lands that have been preserved by the township and nonprofit organizations contribute to this, particularly because they are distributed around the township, and in many cases, occupy extensive areas of frontage along major public roads.
- **Variety of lot sizes and building placement.** Rural development patterns reflect a wide variety of lot sizes and building placement on the land, with varying setbacks and building sizes. Suburban development results in a more uniform pattern of lot sizes and building placement based on zoning regulations. In particular, the uniform layout of lots and house locations (setbacks) in subdivisions, often referred to as “cookie-cutter” development, is antithetical to a rural landscape.
- **Road pattern.** Harding’s road pattern is a significant contributor to the township’s rural landscape. The many narrow, minimally improved, and curvilinear characteristics of the street system are the principal elements that are consistent with rural character. The retention of narrow stone bridges, natural vegetation, and mature trees along roadways are important features of Harding’s road pattern.
- **Limited Commercial Development.** The limited amount of commercial development in Harding is an important component of the existing land use pattern that has enabled the township to retain its character as a predominantly rural residential community. Most of the businesses found in the two commercial areas, Route 202 and New Vernon Village,

are of a small scale and are compatible in design and function with a low-density rural area. There are only a few larger scale office buildings along Route 202, but they are at the edge of the township in close proximity to the I-287 interchange in adjacent Bernards Township.

The following sections elaborate on each of these elements of Harding's rural pattern of development.

Compact Villages

Harding's overall rural pattern of development is organized around the four historic crossroad villages of New Vernon, Green Village, Pleasantville and Logansville. These currently have land use patterns of predominantly residential development at relatively higher densities compared to the surrounding countryside. New Vernon and Green Village still retain elements of the historic village pattern of mixed uses that serve the surrounding community. All four areas have been designated historic districts because they retain a high degree of historic integrity in their buildings and development pattern.

The villages are of small and compact size, with visually discernable boundaries separating them from the surrounding lower density countryside, characteristics of a traditional rural pattern. Home to many of the township's residents, they provide a sense of spatial organization, contrast, variety and historic character to the township's landscape. New Vernon Village is the focal point of the community, formed as it is on the central crossroads at the heart of the community. Most importantly, it is the center of citizen interaction with its traditional mixed use central core and community institutions (the Post Office, Bayne Park, Municipal Building and Houses of Worship) giving Harding a unique sense of place and of community. Most uses in the village are residential. However, of all Harding's villages New Vernon retains many of its historic roots of mixed uses servicing the surrounding community including municipal, religious, retail and other services. There is no public water or sewer infrastructure serving village areas.

Contiguous Large Areas of Open Space

Harding's rural character is greatly influenced by the over 6,200 acres of preserved open space that comprise almost half of the township's land area. The Great Swamp National Wildlife Refuge and Morristown National Historical Park comprise the largest open space areas. Together they represent almost 40% of the township, and they have influenced the township's rural character not just because they remain in their natural state, but because they have essentially isolated Harding from the more typical suburban development found in the surrounding area.

Lewis Morris Park, Loantaka Brook Reservation, and the relatively smaller parcels of preserved open space in the township also contribute significantly to the township's traditional low-density rural character and the great variety of its landscape. In particular, an increasing number of sites preserved by the township and conservation organizations are strategically situated in "gateway"

areas or occupy extensive amounts of road frontage. The high visibility of these preserved areas from public roadways is an important contributing factor to Harding's rural character.

The Low Density Countryside: Established Patterns of Development

Overall, a low density of development is essential to a community's rural character. Aside from major open space areas, the predominant existing land use is low-density single family residential. Within this large area, the average lot size is 5.2 acres.¹ However, there are two distinct patterns of low-density residential development within this area. Figure 18 displays the existing lot patterns that are discussed in this section.

One development pattern is represented by areas that largely have been fully developed consistent with the R-1 District's minimum 3-acre zoning. As a result, a relatively uniform pattern of less rural development based on R-1 zoning standards has emerged in these areas. They are found predominantly in the central portions of the township, particularly north and south of Glen Alpin Road, south of New Vernon Village, west of Route 202 and in the Spring Valley Road area. These areas are displayed as part of the development pattern of lots less than five acres on Figure 18.

In contrast to the areas that have been built out based on R-1 zoning, a second category of low-density development that is prevalent in several areas of the township displays a distinctly rural development pattern, the traditional "countryside," with lots varying greatly in size and configuration. They are displayed as part of the development pattern of lots greater than five acres on Figure 18. These areas are in the northern and eastern sections of the township extending from the Sand Spring Road area to the Great Swamp, in the western section of the township, particularly along Tempe Wick Road, and in the southwestern section of the township, east and west of Lee's Hill Road. The density of existing development in these areas is much lower than in the built-out R-1 areas. They contain historic homes and other buildings traditional to a rural setting such as barns and other farm buildings. Building placement is varied, based in many cases in the requirements of the original landowners, rather than rigid zoning requirements.

There are also many exceptionally large lots in the low-density countryside (displayed as lots greater than ten acres on Figure 18). The lower development density has resulted in less land disturbance and the retention of farmlands, woodlands and hedgerows. Views of open fields and meadows are still evident from public roads. This is apparent in the extensive amount of land displayed as "farmland assessed" on Figure 17. These characteristics contribute to the strong sense of the open countryside and the "rural streetscape" in much of the township.

Limited Commercial & Planned Residential Developments

In a rural community, commercial development is limited in area and scale, and is typically intended generally to serve the needs of residents in the immediate area. New Vernon's business

¹ The area displayed on Figure 18 includes lots within the R-1 Zone as it existed in September 2004, including the entire lot in split-zoned situations. The average lot size of 5.2 acres was calculated excluding split-zoned lots.

area is wholly compatible with and contributes to Harding's rural character, largely because of its compact nature, mixed uses and historic architecture. An area of mostly small-scale commercial development has been established along both sides of the southern part of Mt. Kemble Avenue (Route 202). Although not as rural as other parts of Harding, the limited nature of these uses makes the area compatible with Harding's rural character.

Although automobile-oriented and linear in organization, the Route 202 business area is distinguished from typical "suburban strip" commercial development by the relatively small scale of most uses and the retention of many historic "country-style" buildings. The only large-scale development in this area, and indeed in the township, consists of a few large office buildings near the southern end of the highway close to the I-287 interchange. Areas to the west of Route 202 include large lot single-family development, the National Park and other open space parcels owned by nonprofit organizations. Thus, the commercial uses have been confined to a narrow band along Route 202 and between Route 202 and I-287.

A triangular area formed by Route 202 and Interstate 287 and the township boundary with Morris Township at the northern end of Route 202 contains higher density single-family and multifamily residential development. The higher density in this area is a result of access to public water and sewer infrastructure extended from Morris Township. Although there is some undeveloped land adjacent to the interstate highway, no expansion of sewer infrastructure is planned in accordance with the township's designation as an environmentally sensitive area (Planning Area 5) by the State Planning Commission.

The Mt. Kemble Lake community was planned in the late 1920s around a seasonal recreational lake environment. Most of the homes there have since been converted to full-time residences. The homes are served by a water supply system managed by the Lakeshore Company. The established development pattern is of a cohesive residential neighborhood of modest-sized single-family dwellings on relatively small lots oriented around the Lake. Here, as in the village areas, there is a clear distinction in the density of development contrasting the compact neighborhood with the surrounding lower density countryside.

FUTURE LAND USE PLAN

This Land Use Plan contains significant changes from the previous plan. They are the result of a better understanding of what must be done to achieve the township's planning goals and not because of any significant changes in those goals. The overarching goals of this Master Plan, and in particular this Land Use Plan, relate to the preservation of the township's historic rural character and the protection of environmental resources.

The Conservation Plan element sets forth the township's long-standing environmental preservation goals consistent with Harding's designation within Planning Area 5, the *environmentally sensitive planning area* in the State Development and Redevelopment Plan. To achieve this goal, the amount of land development that can be sustained without substantial impact on sensitive natural resources has been carefully considered in formulating this plan. In

addition, this Land Use Plan establishes land use strategies designed to promote the township's long-standing goal to preserve its rural character.

The following section explains the rationale for the establishment of a new lower density residential district in 2004, the Rural Residential (RR) Zone. Subsequent sections describe each zoning district and the land use policies for each, commencing with the low density residential districts and the Public Land Zone, which make up the bulk of the township and are so important to the township's overall development pattern and character. Figure 19, Future Land Use Plan, displays each land use area (zoning district) consistent with this plan.

Lower Density Zoning to Preserve Harding's Rural Character

In recent years development trends have established a development pattern, in some portions of the township, of large single-family dwellings on 3-acre lots based on the density standards of the R-1 Zone. Previously, much of this area was more rural in character. The original rural pattern of variety in lot sizes and configurations of large lots in some areas has given way to a pattern of relatively uniform building lots where properties have been subdivided and fully developed under the R-1 zoning standards. The Planning Board was concerned about this trend when it reexamined the Master Plan in 2000. This altered development pattern made evident that previous township land use policies were not achieving the long standing goal, dating back to at least the 1972 Master Plan, of preserving the township's rural character.

In addition, a carrying capacity analysis conducted in early 2004 highlighted that existing zoning densities were too high based on the ability of soils to dilute nitrates from septic systems.² In association with the carrying capacity analysis, build-out analyses identified an imbalance between the number of septic systems that represent sustainable development³ and the potential number of systems that could be developed if the township's remaining land was to be subdivided under the R-1 zoning density, further magnifying concerns about the loss of rural character.⁴

The Municipal Land Use Law requires that zoning decisions be made looking beyond individual properties to a generalized consideration of the character of the area. The statutory requirement (C.40:55D-62a) is: "*the zoning ordinance shall be drawn with reasonable consideration to the character of each district and its peculiar suitability for particular uses and to encourage the most appropriate use of land.*" Put into terms that specifically relate to Harding, the boundaries of each zoning district should be based on a combination of factors including the existing

² Hydrogeologic Evaluation, Nitrate Based Carrying Capacity Assessment, Harding Township, Morris County, NJ, Maser Consulting, March 18, 2004.

³ Sustainable development in this context means the number of septic systems that can be developed without contributing excessive nitrates based on the soils characteristics and environmental protection goals.

⁴ The build-out analyses are contained in a letter to the Harding Township Committee from Kimball & Kimball dated March 29, 2004 and a Memorandum from Kimball & Kimball to the Harding Township Committee dated July 21, 2004.

development and/or lot pattern, known environmental conditions, and the township's planning objectives.

This Future Land Use Plan displays the new Rural Residential Zone in areas of the township where cohesive patterns of large lots (five acres or greater) are still predominant. This new zoning district, with a minimum lot size requirement of five acres, is intended to implement the township's long standing goal of preserving the township's traditional rural character and to achieve a better balance in development density on a township-wide basis consistent with sustainable development. Establishment of the new zone is consistent with the purposes of the Municipal Land Use Law,⁵ promotes the general welfare of the community, and is consistent with the goals and objectives of the State Development and Redevelopment Plan for environmentally sensitive areas.

The State Plan Designation:
PA-5 Environmentally Sensitive

The State Planning Act of 1985 established the State Planning Commission (SPC) to develop a new statewide master plan to guide development and redevelopment throughout the state over a 20-year time horizon. The first New Jersey State Development and Redevelopment Plan (the State Plan) was adopted by the SPC in June 1992. The State Plan was reexamined by the State Planning Commission and readopted in March 2001.

A fundamental tenet of the State Plan is that New Jersey's environmental resources should be protected by guiding growth into appropriate planning areas and centers where infrastructure already exists or is planned. The state has been divided into *planning areas*, each with specific planning policies to guide development in accordance with the State Plan: the Metropolitan Planning Area (PA-1), Suburban Planning Area (PA-2), Fringe Planning Area (PA-3), Rural (PA-4A) and Rural/Environmentally Sensitive (PA-4B) Planning Area and the Environmentally Sensitive Planning Area (PA-5).

Harding Township is designated as part of the Environmentally Sensitive Planning Area (PA-5).⁶ The intent of the State Plan for PA-5 areas is to protect environmentally sensitive areas from the adverse impacts of development by preserving low density (or center-based) land use patterns, promoting open space preservation and protecting natural resources. The State Plan's land use and environmental protection policy objectives for the environmentally sensitive planning area are as follows:

***Land Use:** Protect natural systems and environmentally sensitive features by guiding development and redevelopment into centers and establishing community development boundaries and buffers and greenbelts around these boundaries. Maintain open space networks, critical habitat and large contiguous tracts of land in the Environs by a variety of land use techniques. Development and redevelopment should use creative land use and design techniques to ensure that it does not exceed the capacity of the natural and infrastructure*

⁵ The MLUL purposes advanced by the rezoning include the following: a (promotes general welfare), d (avoid conflict with state), e (appropriate densities/environmental preservation), g (appropriate locations for uses), i (desirable visual environment), j (conservation of historic sites, open space, prevent sprawl and environmental degradation).

⁶ The township's affordable housing site is the only land not included within PA-5. It is located in PA-1.

systems and protects areas where public investments in open space preservation have been made. Development and redevelopment in the environs (of centers) should maintain and enhance the natural resources and character of the area.

Natural Resource Conservation: *Protect and preserve large, contiguous tracts and corridors of recreation, forest or other open space land that protects natural systems and sensitive natural resources, including endangered species, ground and surface water resources, wetland systems, natural landscapes of exceptional value, critical slope areas, scenic vistas and other significant environmentally sensitive features.*⁷

To fulfill the planning objectives in the Environmentally Sensitive Planning Area, the State Plan recommends: *the ecological systems in PA-5 should be protected by carefully linking the location, character and magnitude of development to the capacity of the natural and built environment to support new growth and development on a long-term, sustainable resource basis.*⁸ To achieve this objective, municipalities can undertake numerous activities, including incorporating Environmental Resource Inventories (ERI) into the Master Plan, performing build-out analyses to determine the impacts of existing zoning on future development, identifying strategies to protect natural systems, taking steps to ensure the protection of areas critical to water supply and quality, and undertaking a carrying capacity analysis to evaluate sustainable development.

Sustainable Development

Capacity based planning is a process that involves an evaluation of the ability of natural or man-made systems to accommodate existing development and future growth in the context of a community's overall planning goals and objectives. In view of Harding's dependence upon individual wells for potable water and on-site wastewater disposal systems, it was important to evaluate the capacity of the underlying geology and soils to accommodate existing and planned development (i.e. development permitted under existing zoning) without degrading ground and surface water resources. The importance of this also lies in the fact that Harding's streams are of very high quality, the township is host to the Great Swamp National Wildlife Refuge, and the township is in the recharge zone of the Buried Valley Aquifer, a source of drinking water for hundreds of thousands of residents in northern New Jersey.

An evaluation based on the "Nitrate Dilution Model" was undertaken in early 2004 by Maser Consulting Engineers (see the Conservation Plan element for additional details about this evaluation). The analysis recommended minimum development densities based on soils types grouped into distinct areas: area "A" with a development density averaging 3.5 acres per system and area "B" with a development density averaging 4.2 acres per system. The soils in area B are generally less conducive to the dilution of nitrates, which translates into a need for a larger land area for each septic system. Using the recommended densities, the Maser report found that a total of 1616 septic systems can be sustained without exceeding the nitrate limit of 2.0 mg/l,

⁷ The New Jersey State Development and Redevelopment Plan; March 1, 2001; page 218.

⁸ The New Jersey State Development and Redevelopment Plan; March 1, 2001; page 217.

which is the appropriate standard to be used consistent with the antidegradation policies of the NJDEP and Ten Towns Committee for the Great Swamp Watershed.⁹

The carrying capacity evaluation enabled the township to determine whether Harding's zoning would promote sustainable development based on the number of septic systems already in existence and the estimated number of additional systems that might result from full buildout. The results of a build-out analysis showed that the number of homes could be increased by about 55%, resulting in hundreds of new dwellings and about two hundred more septic systems than are sustainable in accordance with the nitrate model. This represents significant growth potential, which is inconsistent with the policies and objectives of the *Environmentally Sensitive Planning Area* (PA-5). The new lower density zone promotes environmental protection goals by achieving a better balance between sustainable development and full buildout.

Established Lot Patterns: Foundation for Rezoning

Zoning should take into account and be based on several factors including environmental conditions, the character of the area and community planning goals. The carrying capacity analysis is but one component supporting the establishment of the Rural Residential (RR) Zone. As described earlier in the section *Established Land Uses and Development Patterns*, the township's rural character is based in large part on established large lot-size patterns that are predominant in many areas. These cohesive lot patterns are evident on Figure 18, which displays the areas with lots that are above and below five acres.¹⁰

Areas where a large lot development pattern still prevails are incorporated into the Rural Residential (RR) Zone with a lower density of permitted development consistent with this pattern. The RR Zone reflects cohesive groupings of lots where the majority conform to the new density; it includes lots that have already been developed and those that may have further development potential. Areas where full build-out under R-1 standards has generally occurred are retained in the R-1 Zone to reflect the established development pattern. The new lower density RR zone promotes the township's overall goal of preserving its traditional rural character.

RR Rural Residential Zone

The new RR Rural Residential Zone has been established in areas of the township exhibiting a cohesive pattern of lots comprised of at least five acres. The guiding planning principle in creating the new zone and the basis for establishing its boundaries was to reflect existing lot size patterns and a density of at least five acres per dwelling unit. In addition to protecting the township's rural character, following this principle inherently promotes other important goals such as historic preservation, sustainable development, and environmental protection. The areas included in the Rural Residential Zone are shown on Figure 19, Future Land Use Plan.

⁹ The Nitrate Dilution Model was not applied to areas with hydric soils, which are occasionally or perpetually saturated with water, because these areas cannot be relied upon for recharge.

¹⁰ Figure 18 displays lots in the R-1 Zone in existence in September 2004.

The boundaries of the RR Zone include developed lots of five-plus acres to properly reflect the prevalent character of development that has already been established in such areas. It also incorporates larger lots with subdivision potential in order to perpetuate the low-density rural character of the township and achieve a better balance between sustainable development and the total amount of development possible under full build-out. Creative designs and development techniques should be encouraged in the Rural Residential Zone to foster development patterns in new subdivisions that are more compatible with the township's rural character.

In addition to patterns of large five-plus acre lots, the characteristics of the areas incorporated into the lower density RR Zone include areas with difficult environmental conditions such as the steep, rugged hills of the Highlands area near Jockey Hollow, and areas of hydric soils, wetlands and flood hazard areas in the north-central, southwestern and southeastern portions of the township. Reducing the density of permitted development in such areas is consistent with the township's general environmental protection policies. Much of the land included in the Silver Lake and Tempe Wick Historic Districts is also included in the Rural Residential Zone. Reducing permitted development density in these areas promotes historic preservation because their historic significance is in part defined by their prevalent rural development pattern.

Almost all dwellings in the RR Zone are served by individual septic and potable water systems. A few lots in the border area with Morris Township have access to Morris Township's sewer system, but no expansion of the sewer service area beyond these lots should be permitted as the entire area is designated PA-5 by the State Planning Commission. Limited water service exists for some properties in the area of Sand Spring Road, Sand Spring Lane and James Street, but no major expansion of the existing water system should be permitted, except as needed to provide for improved facilities to areas already served. The Rural Residential Zone promotes the goal of sustaining an appropriate balance between limited public infrastructure and development densities.

In summary, the Rural Residential Zone promotes the preservation of the township's rural character and streetscape, helps to preserve the significance of historic districts, protects environmentally sensitive areas and natural resources and establishes a better balance between limited infrastructure and sustainable development. These goals will be particularly promoted if creative development techniques such as lot size averaging are utilized in subdivision design. Lot size averaging provides opportunities to promote the continuation of the pattern of lots of varying sizes and configurations that are essential to preserving rural character (see "Creative Development Techniques" in the section entitled "Special Considerations for Future Development").

R-1 Residence Zone

Figure 19 also displays the areas where the R-1 Zone remains in place based upon the prevalent established lot pattern. This development pattern traces its origins to the New Vernon

Neighborhood Restrictive Agreement, which was imposed through protective covenants adopted by landowners in the New Vernon area in 1928.

The primary difference between the R-1 and the RR zones is in the established pattern of lot sizes. The R-1 area is largely comprised of residential developments with an established pattern of 3+ acre lots based upon the zone plan that was in place for many years. These developed areas are found predominantly in the midsection of the township. Almost all single-family dwellings in the R-1 Zone are served by individual septic and potable water systems. There is negligible sewer infrastructure and limited public water service in these areas.

The township's land use policies for these areas should continue the established low-density single-family development pattern consistent with the planning policies of this Master Plan. In accordance with the statewide planning policies of the State Plan for Planning Area 5, no expansion of water and/or sewer service areas should be authorized in the R-1 Zone.

Public Land Zone

This Future Land Use Plan continues the important policy of open space preservation. Harding's rural character has been shaped and its land use policies have been influenced by the significant public land holdings of the Great Swamp National Wildlife Refuge and Morristown National Historical Park. The Public Land Zone comprises the largest single zoning district in the township, representing a total of almost 5,900 acres (about 45% of the township) in the two federal open space areas and the well-distributed smaller public land holdings throughout the community. It represents the permanent preservation of regionally and nationally important open space, environmentally sensitive and historic areas. Consistent with the statewide planning goals for Planning Area 5, the preservation of large contiguous areas of open space is important to protecting the significant wetlands and other environmentally sensitive features of the area and in providing habitat for wildlife.

In addition to the Refuge and the National Park, public land holdings include the county's Lewis Morris Park and Loantaka Brook Reservation, state lands along I-287, including the highway rest area, and numerous areas set aside as municipal open space and or used for public facilities. Many of these areas serve as resources for active or passive recreation and environmental education.

The township's land use policies for the Public Land Zone should be to preserve and protect sites set aside as open space, to maintain sites serving community needs and to continue efforts to set aside additional areas for open space. There are still significant tracts of privately owned open land that are severely environmentally constrained or that contribute to the rural character of the community. The township should continue its policy of preserving sites with significant environmental features, historic resources, or scenic qualities with a target of acquiring at least 500 acres of land over the next 20 years.¹¹ The importance of open space acquisition is highly

¹¹ This is the estimated number of acres that Harding is targeting for open space (400 acres) and farmland (100 acres) preservation by the end of 2025 (see Harding Township's 2004 Cross-Acceptance report.)

valued by Harding residents as evidenced by the dedication of a portion of the property tax to establish an open space trust fund.

Due to high land values it will be increasingly important to leverage funds from many sources to accomplish open space goals. It is also likely that some sites that may be ideal for acquisition or preservation due to their location or physical characteristics will contain historic structures. In cases where existing structures are worthy of preservation, the township will need to develop creative strategies for their continued use or adaptive reuse. Standards should be developed to ensure that any continued use of these sites and structures is compatible with surrounding uses and the township's historic preservation and open space goals.

R-2 Residence Zone

The R-2 Zone is a medium density residential area located adjacent to or extending from villages and along historic township connector roads. In some areas it serves as transition from the higher density historic villages to lower density single-family residential areas. The R-2 zoned areas include single-family dwellings located generally on lots of three quarters of an acre or more with little or no potential for further development. The exception is an undeveloped area to the east of Sand Spring Road and north of I-287 discussed below. The township's future land use policies for the R-2 zoned areas are to preserve their established single-family residential neighborhood character and to maintain the continuity of the development pattern where infill development or redevelopment is possible.

These policies should also apply to two large undeveloped tracts of land east of the Sand Spring Road neighborhood near Morris Township. This area is essentially the rear "yards" of two major office developments in Morris Township.¹² Together they comprise about 40 acres of land and are "landlocked" with no street frontage. Surrounding land uses include the I-287 highway corridor to the south, and the Blackwell Avenue and Frederick Place (in Morris Township) residential neighborhoods to the west and east, respectively. The eastern-most parcel is proposed for acquisition by Morris Township for recreation purposes. Currently, the only means of access to this area is through the adjacent office developments. However, it may be possible to obtain access to the eastern-most parcel through the Frederick Place neighborhood in Morris Township. This area is designated within Planning Area 5 by the State Planning Commission. Harding has no plan to expand the sewer service area or extend sewer infrastructure from the adjacent service area in Morris Township. Any future development in this area for residential or recreational uses will also be limited by the presence of freshwater wetlands.

R-3 Residence Zone

The R-3 zoned areas represent residential development comprised of single-family dwellings on lots typically at least 15,000 square feet. These areas comprise portions of New Vernon (and

¹² A 25-acre portion of this area was counted as land area in connection with the calculation of permitted floor area for the adjacent office development in Morris Township. A condition of site plan approval stipulated that no development should be permitted on the 25-acre portion of the property situated in Harding.

extending outward along Pleasantville Road) and Green Village, which also reflect historic settlement patterns. A third area developed under the R-3 zone standards is found to the west of Sand Spring Road north of I-287 near Morris Township. This is an area of compact residential lots with a strong sense of neighborhood extending into Harding from Mt. Kemble Avenue (Route 202). The development density in this area is the result of the availability of public water and/or sewer facilities, which have been limited to this area with no planned expansion.

The township's land use policy for the R-3 Zone is to promote the continuation of the historic and established pattern of development in village areas and the scale of homes built in the district and in the villages. The township's land use policies should also take into account the difficulty of providing onsite sewage disposal systems on relatively small lots in village areas because no public infrastructure is planned for these areas. Extending public sewer infrastructure to these areas is inappropriate because they are included within Planning Area 5, the environmentally sensitive planning area in the State Plan.

R-4 Residence Zone

The R-4 Zone permits the smallest lot size for residential development in the township and reflects the historic development patterns established in Mt. Kemble Lake, New Vernon Village and Green Village. The zone requires a minimum lot size of 9,000 square feet, consistent with much of the historical development in these areas. The township's land use policies for the R-4 Zone are to promote the continuation of the established historic pattern of development and the compact scale of homes built in the district and in villages. The township's land use policies should also take into account the difficulty of providing onsite sewage disposal systems on small lots because no sewer infrastructure is planned for these areas since they are included within Planning Area 5, the environmentally sensitive planning area in the State Plan.

B-1 Historic Village Business Zone (New Vernon Village)

New Vernon Village is the focal point for the entire Harding community. At its core is a mixed residential/commercial neighborhood based on the early settlement pattern of New Vernon. The B-1 Historic Village Business Zone is part of the New Vernon Historic District, a state and nationally registered district. It is also the subject of a redevelopment area designation and redevelopment plan intended to promote the revitalization of the village core. The principal objective of the redevelopment plan is to maintain the historic character of New Vernon and its traditional role as the cultural center of the community by promoting a balance of commercial and residential uses and by re-establishing the Post Office in the village center (see the subsection "New Vernon Village" under "Special Considerations for Future Development").

The township's land use policies for this zone should be to maintain its role as the focal point for the community by ensuring a balance of residential and commercial uses that primarily serve Harding residents. Land use policies should encourage the continuation of the historic qualities and pattern of the "built" environment including the architectural scale and arrangement of uses,

buildings, and other improvements such as signs and lighting in the historic district. It should also recognize the small lot development pattern that was established in this area many years ago and the difficulty of accommodating on-site wastewater systems. Shared parking lots and traffic-calming techniques should be encouraged to promote pedestrian-friendly development compatible with the historic character and scale of the village.

B-2 Business Zone (Route 202)

The Mt. Kemble Avenue (Route 202) business area has its roots in the first zone plan for the township adopted in 1930. Providing relatively easy access to the surrounding communities, and in particular, as the major route between Morristown and Bernardsville, early zoning permitted nonresidential development along the highway. Later, the construction of the interstate highway parallel and very close to Route 202 resulted in a narrow strip of land between the highways that was unsuitable for residential uses. The B-2 Zone extends along Route 202 on both sides of the highway (with an intervening area zoned OB on the eastern side) from Bernards Township northward; on the western side of Route 202, it extends nearly to the Tempe Wick/Glen Alpin Road intersection.

The area was not conceived of as a high growth, high intensity commercial area because of its many sensitive features, including adjacent historic resources, environmental features (especially Primrose Brook, which is of very high water quality) and residential areas. It was an area for commercial uses at modest scale and intensity. Mt. Kemble Avenue is a historic roadway that is the principal approach to Morristown National Historical Park and adjacent to which there are a number of historic structures.

The zoning standards for this area were revised in the 1990s to maintain the established level of development intensity. The township's land use policies for the B-2 Zone should discourage strip development and sprawl and encourage development and uses that are compatible with the overall character of the township and the area's historic roots and its gateway location to Morristown National Historical Park. Limited signage and low-impact lighting are important in this regard. In addition, land use policies should permit the development of an assisted living facility for the elderly in this area because of its easy access and proximity to Morristown where a full range of health and hospital services are located. This is a relatively new and *inherently beneficial*¹³ use providing for housing for senior citizens combined with limited medical care for residents. The traffic generated from such a development is far less than a commercial use of a similar scale, and a small project could be served by on-site well and septic systems.

OB Office Building Zone

The Office Building Zone, as shown on Figure 19 is limited to a small area between Mt. Kemble Avenue (Route 202) and I-287 in the southern portion of the township. It is only approximately 800 feet deep and was fully developed by 1982. The construction of I-287 created this unusual area sandwiched between the highway and Route 202, which, with easy access to the highway interchange in Bernards Township and water service from the Borough of Bernardsville, was the only area in Harding that was appropriate for the development of office buildings.

¹³ *Inherently beneficial* uses are deemed to be in the public interest and promote the general welfare.

The future land use policy for this limited zoning district is to maintain the established level of development intensity. However, if the opportunity for redevelopment should arise, alternative uses of lesser intensity should be considered, provided that no expansion of existing or new infrastructure should be permitted. In particular, an assisted living facility, which would be less intense and generate less traffic than office buildings, would be an appropriate alternative land use in this area since it benefits from easy access to Morristown where additional health and hospital services are found.

PRN/RC Planned Residential Neighborhood

This area, designated Planned Residential Neighborhood/Residential Cluster (PRN-RC), contains two planned residential developments (Harding Green and Shadowbrook) in the northwestern corner of the township between routes 202 and I-287. This development pattern is the result of zoning established in 1976. This was one of the few areas of the township where relatively higher density residential development was suitable because of its location between major roads and available public water and sewer infrastructure. These were important considerations in permitting the relatively higher density in this zone, up to four units per acre. South of the Shadowbrook development, leading to where the two highway rights-of-way converge, there are four lots containing three single-family dwellings and a business.

The future land use policy for this zone should be to maintain the established development pattern and provide for the continued use of the four lots not included in the planned developments. Those lots comprise about seven acres of land, an insufficient area for a project similar to those already established in this zone. In view of their isolation from other residential neighborhoods, they should remain in the PRN-RC Zone. If they can be consolidated at some future time, they could be redeveloped for an assisted living facility.

AH Affordable Housing Zone

Figure 19 displays the township's eight-acre affordable housing site located at the intersection of Kitchell Road and Woodland Avenue adjacent to Morris Township. Acquired by the township in 1994, the site is ideally suited for multifamily residential development because of its proximity adjacent to existing public water and sewer infrastructure and its location across from a large multifamily housing development known as the *Moore Estate* in Morris Township. In recognition of the presence of existing infrastructure and adjacent multifamily land uses, in 1997 the State Planning Commission extended the adjacent Planning Area 1 designation from Morris Township so as to encompass the site. This is the only area in Harding that is designated within Planning Area 1, and where public water and sewer infrastructure is intended to facilitate new development.

The land use policy for this zone is to permit moderate density multifamily residential development, compatible with the neighboring multifamily land use, in satisfaction of the township's affordable housing obligation. Completed in 2006, the 24-unit affordable housing

development known as *The Farm at Harding* is designed to resemble a series of farm buildings in keeping with Harding's rural character and agricultural heritage.

SPECIAL CONSIDERATIONS FOR FUTURE DEVELOPMENT

As the township continues to develop, its ability to maintain its rural historic character and protect its environmental resources and the Great Swamp is of increasing concern. To a certain degree, state laws and regulations manage land development through the regulatory permit processes of the state departments of Environmental Protection and Transportation. Other state laws provide communities with special powers to promote development or redevelopment and to manage growth consistent with community planning goals. Following are a number of special considerations that should affect future development in Harding.

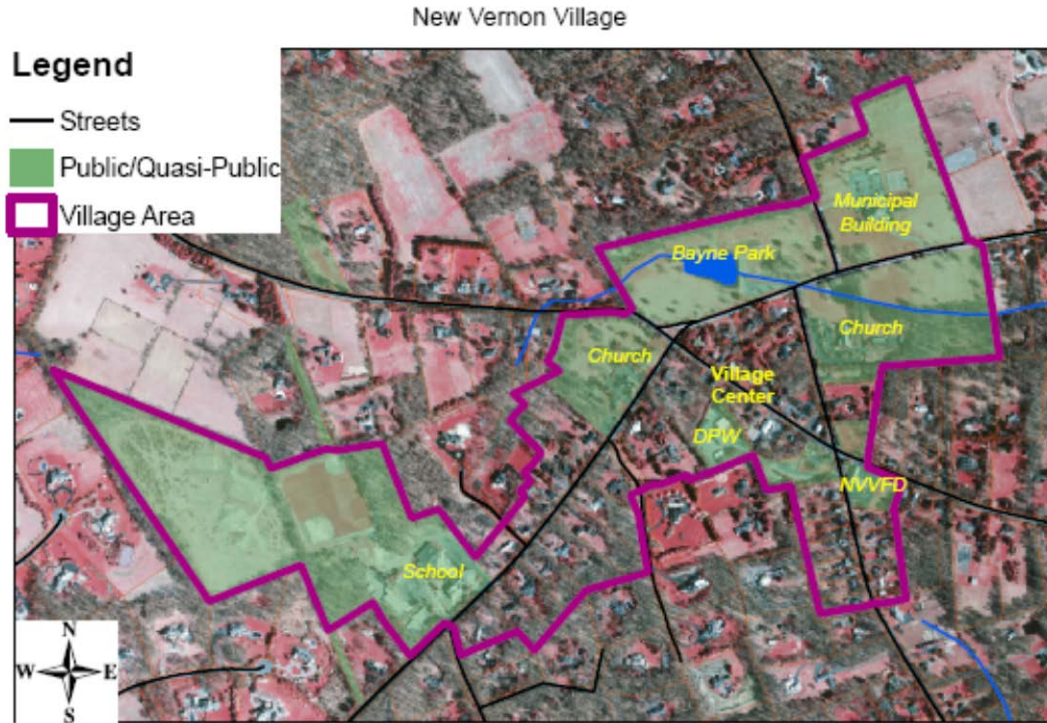
New Vernon Village

Historically, New Vernon Village developed around several of the township's major cross-roads. It is the township's community center where principal civic institutions and a few small-scale commercial uses are located, all of which help to define Harding's sense of place and community.

Like the rest of Harding, the village has a strong residential character, but with dwelling units of a relatively small scale that provide a variety of housing types not otherwise generally available in the township. This mix of uses and higher density and intensity of development is vital to promoting its character as a village and distinguishes it from the surrounding countryside. Finally, its location as host to many of the township's major civic institutions, including Kirby Hall, Bayne Park, Houses of Worship, the Harding Elementary School, and the New Vernon Firehouse defines the village as the central place where citizens gather for the everyday and major events of the township's civic life.

In 1982 a portion of New Vernon Village was designated a historic district and included on the State and the National Register of Historic Places. In 1993 and in 2005 a slightly larger area was designated a municipal historic district in the township's Historic Preservation Plan. In 2003, the small central business area of the village was the subject of a redevelopment plan (see "New Vernon Redevelopment Plan" below) and in 2006 the Planning Board established a subcommittee to study the broader village area to consider ways in which its role as Harding's community focal point might be enhanced.

The extent or boundaries of New Vernon Village, in contrast to the surrounding countryside, are defined by three factors: the close proximity of major community institutions, mixed uses, and higher density small-scale dwellings.



The overall planning goals for the village area are to preserve its historic character and promote the continuance of its traditional role as the focus of the Harding community’s civic life. The following objectives are designed to achieve these goals.

- The historic character of the village streetscape should be preserved.
- Private and public uses that promote the interaction of Harding residents should be retained within the village.
- Land use policies should promote redevelopment within the village by permitting reasonable expansions while retaining the relative small scale of buildings.
- The village’s mix-use character, with a variety of residential, commercial and institutional uses, should be continued.
- The pedestrian scale and orientation of the village should be enhanced through improvements to footpaths and shared parking.
- Infrastructure improvements should be investigated including the feasibility of converting electric and telephone lines to underground utilities and whether public water supply improvements are needed to address public health concerns.

New Vernon Village Redevelopment Plan

In 2003 the Township Committee designated a portion of New Vernon Village as an “area in need of redevelopment” and adopted a redevelopment plan to guide revitalization efforts. The New Vernon Village Redevelopment Plan, adopted in May 2003, focused upon the relatively small central core of New Vernon Village comprised of the B-1 Zone and adjacent township land where the Tunis-Ellicks House and Department of Public Works are located.

The designation of the redevelopment area and preparation of the plan were in response to community concerns at that time about the potential permanent loss of the Post Office from New Vernon and other changes affecting properties within the village and Historic District. Some properties had fallen into disrepair, and a prominent business had been vacated. Small lot sizes, in combination with modern zoning and wastewater requirements, limited prospects for private redevelopment and new business uses.

The redevelopment plan’s revitalization objectives are guided by the principles of preserving the traditional character of the village and reinforcing its roots as a pedestrian-friendly environment, encouraging historic preservation, and promoting mixed uses to help maintain a balance of residential and commercial land uses in the village core. The plan encourages private revitalization guided by the township to maintain the village of New Vernon as a focal point for the entire community. Following is a table summarizing the redevelopment plan and the recommended strategies to implement the plan’s objectives.

REDEVELOPMENT PLAN COMPONENT	REDEVELOPMENT PLAN STRATEGY
Post Office	The plan identified two potential sites for a new Post Office. It has been built as part of a mixed used development in the preferred location, the site of the former “Ortman’s Garage.”
Library	The plan established a site for a new library in the designated redevelopment area and an alternative location at the nearby Municipal Building site. The latter site has since been selected by the Township Committee.
Land uses	--Residential: the plan identified goals and objectives to maintain a variety of residential uses in the village and encourages the provision of affordable housing. --Nonresidential: the plan identified currently permitted and proposed new nonresidential land uses.
Public safety improvements and circulation	The plan identified the need and location(s) for: pedestrian pathways, village parking, a cistern for fire fighting, and traffic calming and control.
Wastewater management	The plan recommended a study of wastewater management solutions that will encourage redevelopment.
Historic preservation	The plan supported the preservation of historic resources and provided a development incentive to encourage the retention of historic structures.
Redevelopment Area design guidelines	The plan established general design objectives for the redevelopment area. Design guidelines prepared by a Historic Preservation Architect are available to the Historic Preservation Commission and property owners to promote development compatible with the Historic District.

Development Rights for Nonconforming Lots

In establishing the new Rural Residential Zone where large lots prevail and/or where the established development pattern is generally of a lower density than the R-1 Zone, it is likely that some lots included within the zone will not meet the new minimum lot size of five acres. This is because in some areas a small number of lots developed on the basis of the previous R-1 zoning may be surrounded by a broader area of larger lots. In these cases, the undersized lots are *grandfathered* and have the legal right to remain as they are.

Harding's ordinance contains provisions allowing vacant pre-existing undersized lots to be developed without a variance as long as the bulk requirements/limitations of the zone are met (section 105-130B). The ordinance implementing the Rural Residential zoning includes additional provisions to permit homeowners of undersized lots in single-family residential zones to rebuild or make improvements to their homes and property as long as the improvements comply with other bulk limitations. This is fair and equitable and represents sound planning practice.

Residential Building Limitations

An overriding goal of this Master Plan is the preservation and continuation of the township's historic rural residential development pattern. A trend of particular concern is of very large homes on minimum-sized lots. In smaller lot zones, this concern is magnified when an existing small home is demolished or renovated to be replaced by a large home that is out of scale or incompatible with the established neighborhood.

To continue the traditional historic pattern and promote compatible new development, the size of new dwellings and accessory structures should have a proportionate relationship to lot size and be in scale with established neighborhoods. In rural areas very large homes should have larger than minimum-sized lots and should be set back substantially from new or existing roads. This policy will promote the preservation of Harding's streetscapes, also an important Master Plan goal, by minimizing the perceived scale and prominence of these newer structures. In addition, lot disturbance and impervious coverage in rural areas should be reduced to lessen the impact of new development on the environmentally sensitive resources that typically characterize the remaining undeveloped land. Harding's landscape should continue to be heavily influenced by the prominent presence and visibility of large trees and wooded areas, open meadows, farm fields, and historic structures along narrow, curvilinear roadways.

Historic Preservation

Older homes and other historic structures are often situated on small lots and/or close to roadways in village settings such as New Vernon, Green Village, Mt. Kemble Lake, and elsewhere along rural roadways. Rigid zoning often undermines historic preservation by creating disincentives for the improvement of structures and incentives for their demolition. A large

percentage of historic structures do not conform to zoning standards, making it more difficult for owners to improve them. This can ultimately result in their loss.

High property values have also made it economically attractive for developers to demolish old structures in order to enhance the development potential of individual lots or maximize the number of lots possible in new subdivisions. The Historic Preservation Commission, Planning Board and Board of Adjustment should continue to work with property owners to avoid the demolition of historic structures. Reduced lot and/or setback standards should be permitted when necessary and reasonable to facilitate the preservation of historic structures and the township's rural character. To preserve and protect the character of historic districts, new "infill" development and renovations/additions to existing historic structures should be undertaken in a way that does not substantially alter the established scale of historic buildings.

Wireless Telecommunications

The township has established reasonable standards for the installation of wireless telecommunications facilities so that the need for communications services can be balanced against the township's important land use goals and objectives, especially the goals of preserving the township's rural residential and historic character. Of particular concern is the visual impact of large towers on the township's historic rural character and landscape.

As a general policy, a scattered network of small antennas placed in or upon existing structures should be encouraged. However, if a tower is necessary to provide adequate coverage it should be located in a commercial area where there will not be a substantial impact on adjacent residential or historic areas. The joint use of new and existing tower sites by multiple providers should be encouraged to avoid the installation of multiple towers. Cooperation with neighboring communities could also help minimize the total number of antennas needed to provide service.

The following policies should serve as the basis for the township's land use regulations for the installation of wireless telecommunications facilities.

1. To minimize the use of large towers, small antennas should be encouraged whenever they can be located on or in existing structures, particularly public or quasi-public property (schools, churches, firehouses, etc.), subject to reasonable standards and site plan review.
2. The use of wireless telecommunications towers to support antennas and associated equipment lockers should be minimized through the use of antennas in or on existing structures and co-location.
3. When large towers are necessary they should be located in commercial areas. They should not be located in areas where they will have a substantial negative impact on the character of historic districts or sites and/or residential areas.

Protection of Critical Areas & Natural Resources

As the township's remaining vacant land is developed there are encroachments on areas previously left in their natural state. Many were previously considered too difficult to develop, particularly tracts with steep slopes, wetlands or other environmental constraints. These areas often contain critical areas of special environmental concern or natural resources of particular value as described in the Conservation Plan element. As Harding's remaining vacant land is subdivided it is important that new lots contain sufficient areas free of environmental constraints to accommodate development. Following is a description of the critical areas and natural resources of special concern in Harding that deserve special consideration and protection.

Protection of Steep Slopes

Much of the steeply sloping topography in the township is found west of Route 202, especially in the Jockey Hollow area. However, there are areas of steep slopes in other parts of the township. It is very difficult to maintain the natural rate and quality of stormwater runoff in steeply sloping areas after development. This increases the potential for soil erosion and flooding of "downstream" properties.

In accordance with the recommendations contained in the Conservation Plan element and consistent with state planning policies for environmentally sensitive areas, the township has enacted an ordinance limiting land disturbance in steeply sloping areas. Developers should be required to undertake careful planning and analysis of any necessary soil removal, fill, or grading associated with development.

Protection of Mature Trees

Trees, woodlands and hedgerows can slow, and to an extent, absorb stormwater runoff. Retention of these areas enhances our ability to control stormwater runoff. They are beneficial to the environment because they control soil erosion and increase groundwater recharge. Trees and other vegetation are also important to maintaining privacy in residential areas and to preserving the rural character of the township. Mature trees are an important element of the traditional historic character of the township, especially along public roadways. For these reasons, township land use policies should discourage the indiscriminate, uncontrolled and excessive destruction of trees and specimen vegetation.

Protection of Stream Corridors & Unique Natural or Environmentally Sensitive Areas

Harding contains many streams of high water quality and other water bodies. There are also unique natural areas and areas of special environmental sensitivity including mature forests, areas containing habitats for threatened or endangered species, areas of extraordinary steep slopes and areas with scenic views. These areas deserve special protection to preserve them. When they are

identified as part of the review process for new development, measures should be put in place to protect them. Some protective techniques may be as simple as establishing limits of land disturbance and tree protection efforts during construction. Wherever appropriate, conservation easements should be established for permanent preservation. Easements should be monitored periodically for conformance with township standards.

Protection of the Night Sky

Nighttime darkness is an essential quality of rural residential life and a key component of the historic landscape. Limiting unnecessary artificial light protects night sky vista for all residents and preserves appropriate habitat for native fauna. As a host to both the Great Swamp National Wildlife Refuge and Jockey Hollow National Park, Harding Township has a stewardship role in preserving these ecological resources by minimizing the impact of artificial light on these conserved lands. Harding Township's commitment to the preservation of nighttime darkness was recognized by receipt of the 2009 Dark Sky Award from the United Astronomy Clubs of New Jersey.

Creative Development Techniques

The single most often expressed planning goal of township residents is to retain the township's traditional historic and rural character. It is also the major goal of this Master Plan. Zoning is necessary to preserve the low-density pattern of development. However, rigid zoning requirements, over the long term, create uniformity in the pattern of development that is antithetical to the township's planning goals. Even large lot zoning, if imposed with rigidity and uniformity, can eventually promote a suburban character, albeit at low density.

In rural landscapes, low-density development (usually homes and farms) is typically widely spaced or clustered in small village groupings. Large open and/or wooded areas are common. The pattern of lot sizes in rural landscapes is an important design element. They typically vary greatly, with relatively small lots often next to very large lots. The siting of buildings is determined by the geographical and natural characteristics and limitations of the site instead of the imposition of uniform and rigid zoning standards that ignore these characteristics. Variability of building setbacks and building orientation is also typical in a rural landscape. These patterns should be perpetuated.

Creative Design in Subdivisions

Over the years, alternatives to standard zoning have been developed with mixed results. In the Harding context, zoning and subdivision standards should be designed and/or administered to promote the following planning goals:

- To promote the preservation of large areas of open space, especially the highly visible areas along public roadways.
- To promote the preservation of community character and areas of significant community concern such as scenic vistas, historic areas and structures, and natural resources.

- To preserve stone rows, hedgerows, mature trees and other natural vegetation, to minimize land disturbance and to promote privacy among existing and proposed residences.
- To improve the design of new development, promoting a variety of lot sizes to be more consistent with the township's rural characteristics, and to permit the placement of new roads and buildings reflecting the characteristics and environmental sensitivities of the site, instead of mere adherence to rigid standards.

Lot size averaging is a creative development alternative to conventional “cookie cutter” subdivisions that result in uniform lot layouts and the destruction of natural land features. This development option, permitted by the Municipal Land Use Law, is authorized in the Rural Residential Zone to allow the Planning Board to approve flexible development standards in subdivisions so that individual lot sizes can be varied, permitting smaller lots offset by larger lots, to achieve the objectives outlined above. The ordinance establishes a minimum lot size of three acres to assure a minimum low-density throughout the development. It also contains provisions to ensure that the overall density of development (the number of homes to be constructed) does not exceed the five-acre zoning density. The implementation of these recommendations will promote the preservation of rural streetscapes, protect environmentally sensitive areas and maintain the variety of lot sizes and building arrangements that is so fundamental to Harding's rural character.