CHATHAM TOWNSHIP MASTER PLAN 2006 REEXAMINATION REPORT

INTRODUCTION

A reexamination report is a review of municipal land development policies as expressed in the master plan and as implemented in its development ordinances. The intent of the reexamination report is to encourage timely revisions to the master plan and to the development ordinances or to reaffirm the validity of existing policies and legislation. This document constitutes the Chatham Township Planning Board's reexamination report prepared and adopted in accordance with the Municipal Land Use Law (MLUL), N.J.S.A.40:55D-89 which specifies the following requirement for periodic examination of a municipal Master Plan:

The governing body shall, at least every six years, provide for a general reexamination of its master plan and development regulations by the planning board which shall prepare and adopt by resolution a report on the findings of such reexamination, a copy of which report and resolution shall be sent to the county planning board and the municipal clerk of each adjoining municipality. The first such reexamination shall have been completed by August 1, 1982. The next reexamination shall be completed by August 1, 1988. Thereafter, a reexamination shall be completed at least once every 6 years from the previous reexamination.

A comprehensive *Master Plan* was adopted by the Planning Board in October 1999, with amendments through April 3, 2000. Prior to that, *Master Plan Reexamination Reports* were adopted by the Planning Board in 1994 and, prior to that date, in 1988 and 1982. In addition, the Planning Board adopted the *Housing Element / Fair Share Plan Element* on November 21, 2005, the *Conservation Plan Element* in June 2005, a Municipal Stormwater Management Plan on June 6, 2005, and a study entitled *Community Forestry Management Plan 2003-2008* on March 15, 2003 and a Natural Resources Inventory in Fall 1999.

The MLUL sets forth the following questions that must be addressed in the Reexamination Report:

<u>C. 40.55D-89a</u> The major problems and objectives relating to land development in the municipality at the time of the adoption of the last reexamination report.

<u>C. 40.55D-89b</u> The extent to which such problems and objectives have been reduced or have increased subsequent to such date.

<u>C. 40.55D-89c</u> The extent to which there have been significant changes in the assumptions, policies and objectives forming the basis for the master plan or development regulations as last revised, with particular regard to the density and distribution of population and land uses, housing conditions, circulation, conservation of natural resources, energy conservation,

collection, disposition and recycling of designated recyclable materials, and changes in State, county and municipal policies and objectives

<u>C. 40.55D-89d</u> The specific changes for the master plan or development regulations, if any, including underlying objectives, policies and standards, or whether a new plan or regulations should be proposed.

<u>C. 40.55D-89e</u> The recommendations of the planning board concerning the incorporation of redevelopment plans adopted pursuant to the "Local Redevelopment and Housing Law", P.L. 1992, c. 79 (C. 40.4.12A-1 et seq.) into the land use plan element of the municipal master plan, and recommended changes, if any, in the local development regulations necessary to effectuate the redevelopment plans of the municipality.

The following sections respond to each of the statutory requirements noted above.

A. MAJOR PROBLEMS AND OBJECTIVES RELATING TO LAND DEVELOPMENT IN THE MUNICIPALITY AT THE TIME OF THE ADOPTION OF THE LAST MASTER PLAN

The 1999 Master Plan envisioned an ultimate population threshold of approximately 11,000 to be accommodated through "a growth management approach to development wherein the location, intensity and timing of development is coordinated with the availability of essential infrastructure and the ability of the Township to meet demands for municipal facilities and services." Citing the need to preserve the residential character of the Township while providing opportunities for growth where appropriate, the Master Plan identified 13 specific objectives discussed in Section B below.

B. THE EXTENT TO WHICH PROBLEMS AND OBJECTIVES HAVE BEEN REDUCED OR INCREASED

There has been significant progress in addressing the problems and objectives highlighted in 1999. The progress on each of the items is summarized below.

1. To monitor and participate in regional planning activities, especially those at the State and County levels, in terms of their potential impact on local planning and development

Chatham Township is actively participating in the current Cross Acceptance process with Morris County in preparation for the re-adoption of the State Development and Redevelopment Plan The Township supports regional planning through its membership with nine other municipalities in the Ten Towns Great Swamp Watershed Management Committee Chatham Township also participates with the Borough of Madison, Chatham Borough, Morris Township, Florham Park, and some Union County and Essex County municipalities on the "SEAMLESS" planning group to examine long- and short-term planning issues affecting the south-east Morris county area.

2. To coordinate local planning efforts with those of neighboring municipalities in order to achieve a maximum degree of compatibility especially along common municipal boundaries.

Generally, the Township's zone plan is believed to be compatible with seven adjoining municipalities, although some concerns were noted, as follows:

- In the Borough of Madison, drainage problems were cited from a townhouse development immediately east of Green Avenue, as were potential adverse impacts from traffic and stormwater runoff from the Giralda Farms office campus, which are not known at this time. Madison has made some improvements to the stormwater drainage that flows to the Sterling property. A stormceptor has been installed at Sunset Lake in conjunction with the US Fish and Wildlife Service, final costs to be shared with Madison and Morris County. No progress has been made on the runoff issues at Giralda Farms.
- Similar concerns were expressed regarding development in Morris Township, specifically traffic impacts from both office and residential development and stormwater runoff affecting the Loantaka Brook Reservation and the Great Swamp
- 3. To recognize and plan for the needs of local residents through study of demographic conditions.

The *Master Plan* adopted in 1999 envisioned the ultimate residential build-out for the Township to be approximately 11,000. As of the 2000 Census the population was 10,090, slightly higher than the Morris County Planning Board projection of 9,902 for the year 2000 cited in the *Master Plan*. As seen in the 2000 Census, when compared to State and County residents, Chatham Township residents are older, wealthier, and better educated. Over 60% of Chatham Township residents are over 35 years of age, and a quarter of the population is over 55. Median incomes in Chatham Township were more than twice the state average in 2000, and the proportion of persons and families living in poverty was roughly one-third of the level seen statewide, and lower than the poverty rate in Morris County. The high income of Chatham Township residents corresponds with their comparatively high educational attainment, with only 3% not graduating high school (compared to 9% for Morris County and 18% statewide. Additionally, 67% of Township residents have a bachelor's degree or higher compared to 44% for the County and less that 30% statewide. The 2005 Housing Element provided a summary of demographic and housing characteristics as required by law.

4 To maintain a reasonable balance of housing types for all segments of the population

Housing opportunities for households in the upper and middle income brackets in the Township are provided for by the market, and opportunities for low income households currently exceed the requirements mandated by Council on Affordable Housing (COAH). Subsequent to a Final Judgment of Compliance (Green Village 139 Corp. et al v. Township of Chatham et al.), Chatham received substantive certification from COAH on March 5, 1997 for its revised *Housing Element and Fair Share Plan*. At present, the the Township is awaiting substantive certification from COAH for the *Housing Element and Fair Share Plan* adopted by the Planning Board November 21, 2005 for the purpose of addressing Chatham Township's Third Round obligation.

- 5. To offer flexibility in development techniques.
 - A number of regulatory techniques were identified in the 1999 Master Plan's Open Space Element to promote development flexibility and preserve open space

The Township's present land use regulations include provisions for residential cluster, lot size averaging, planned development for multi-family projects, and a Planned Commercial District Regulations have also been adopted by Ordinance limiting disturbance to steep slopes, controlling development within flood hazard areas, and setting buffers to stream corridors.

6. To limit non-residential development to appropriate areas of the Township which will be in keeping with the existing character of the community

The Township has established five (5) districts to accommodate retail and professional office activity, including a planned commercial development zone. The Hickory Tree Business Center District is considered the Township's "downtown" area due to its size and variety of commercial activities.

7. To promote pedestrian and bicycle circulation, not only to reduce traffic, but also to facilitate the safety and enjoyment of the walking cycling public.

The 1999 Master Plan includes a Walkway/Bikeway Plan Element to establish a safe and comprehensive system of pedestrian and bicycle routes throughout the Township linking open space, recreational areas, residential neighborhoods and business centers. Specific recommendations included the creation of shared roadways with designated bike lanes and the development of multi-use paths, set apart from vehicular traffic, for walking, jogging and bicycle use. Sidewalks along one or both sides of major roads within the Township were also proposed.

Some progress toward achievement of the objectives in the 1999 Master Plan has been made. Sidewalks have been installed along Southern Boulevard, and the planning board required sidewalk installation on the Oak Knoll, Melrose, and Sterling projects among others. Additionally, the Township has applied for grants to construct other sidewalks (such as along Meyersville Road) but to date has not been successful in receiving funds. A streetscape plan for the Hickory Tree area was begun, and crosswalks were painted across Shunpike and Green Village Rd. in this area. The economic and practical feasibility of implementing the proposed Walkway/Bikeway Plan has yet to be determined. The Township is currently preparing an analysis that will examine connections within and beyond Chatham Township and identify critical linkages and viable routes for multi-modal non-motorized travel.

8 To maintain a basic system of existing roads and plan for integration of future transportation needs.

The Circulation Element in the 1999 Master Plan included an analysis of the Township's road network and recommended further study and specific improvements including the widening of

municipal and county roads in conjunction with new development then under consideration. Changes proposed in the commercial district, including the then-proposed realignment of Green Village Road to the north of Shunpike Road, will have to be reevaluated in light of the new residential development in that vicinity.

- 9. To designate and provide an opportunity to preserve land in appropriate locations to meet land requirements for future community facility, recreational, and open space needs by
 - a. promoting greater sensitivity to environmental concerns by recognizing wetland, steep slope and floodplain constraints.
 - b. offering greater protection to the Great Swamp National Wildlife Refuge and other public lands, not only through careful control of development in the watershed, but also through acquisition of additional lands adjoining the public lands.
 - c. preserving other vacant lands, recognizing that they are limited and, once developed, are lost forever.

Nearly 200 acres of open space have been purchased with Open Space Tax funds and set aside for preservation in Chatham Township since Oct 1999. Preservation of the Kirby property in particular promotes water quality and limits future runoff problems into the Loantaka and Black Brooks which lead to the Great Swamp.

Chatham Recreation coordinates the joint recreation program of The Chathams, with 20 sites identified for active recreation use, and expanding initiatives have been undertaken jointly with Chatham Borough to develop playing fields. New facilities include the Township's Skate Park and Woodland Park, acquired in cooperation with Chatham Borough, for athletic facilities. The Township is planning to install artificial turf at Lum Avenue and possibly other fields jointly with the Borough and the Chatham Athletic Foundation, due to limited remaining level non-wetland area that could be used for recreation.

10. To protect the water resources which dominate the Township's physical character. These resources include the Passaic River, two major feeder streams of the Great Swamp and the Great Swamp National Wildlife Refuge itself.

The Township has established the Great Swamp Watershed Overlay District to provide for a comprehensive stormwater management plan within the Watershed, and adopted ordinances to protect the Watershed. The Planning Board also adopted a Conservation Plan Element and a Municipal Stormwater Management Plan in June 2005, each containing specific proposals to further enhance the protective measures for the stream considers and the portion of the Great Swamp within Chatham. Elevated phosphorus levels in the Township's drinking water; which finds its way into the sewage treatment plant, ultimately discharges into the Great Swamp. The quality of the effluent is dependent to some extent on the quality of the drinking water.

11. To preserve the local heritage by protecting historic buildings and other landmarks for the cultural benefit of present and future generations.

Cultural and historic resource protection has been advanced through the preparation of a *Historic Preservation Element* which includes a Historic Site Survey, although no historic districts have been designated within the zoning ordinance. Of the 56 historic dwellings identified in the Historic Site Survey, three have been demolished, to be replaced with new construction. The Historical Society of the Township of Chatham, a membership organization established in 1975 to increase knowledge, awareness and preservation of Township history has played an educational role. To date no Historic Preservation Commission has been established pursuant to the Municipal Land Use Law although the governing body has expressed interest in historic preservation and is investigating a variety of methods to protect historic resources.

12 To encourage the continuation of remaining agricultural activity.

Development pressures have increased, as noted above, to the point where existing viable and attractive homes are being replaced with new, larger homes. Since 1999, some farmlands have been converted to housing and others are slated for commercial development. Agricultural activity consists of a large, recently expanded nursery operation, pastureland and a Christmas tree farm.

13. To create a planning and development environment that will promote fiscally sound municipal government affordable to all residents.

Over the past 10 years, development and the accompanying increase in population growth has resulted in increased demand for government services and put additional stress on municipal facilities. The increase in school population has required the expansion of school classroom facilities, cafeterias and playing fields. The increased demand for recreational facilities has created a requirement for additional open space for recreational facilities and a need to rebuild the existing recreational fields with artificial turf and lighting to accommodate additional activities. This growth has had a fiscal impact on property taxes, in particular on school taxes, but also on municipal taxes, as municipal resources are utilized to build and maintain recreational facilities.

The ability of the Township to continue to grow is limited by the availability of useable vacant land, existing zoning, and the capacity of municipal wastewater facilities to service future development. The current wastewater capacity is based on existing zoning and a DEP-allowed sewer expansion after a five-year review period with a strictly conditioned permit in 1993. The Township wasn't able to meet the conditions of the permit until 1997. Because of the state's tightening discharge requirements and the existence of the Great Swamp National Wildlife Refuge downstream from the sewer plant, it is unlikely that increased capacity would be approved in the future. Increased development dependent on the Tanglewood wastewater facility is not possible given the constraints of the wastewater permit. To be fiscally responsible, the town needs to monitor and plan for changes in State wastewater standards. Any development beyond the rated capacity of natural and built infrastructure and any increase in the density of

current zoning will destabilize the fiscal condition of the municipal government and increase pressure on the property tax base.

The Township has implemented a series of joint initiatives with Chatham Borough to achieve economies of scale in providing emergency services, athletic programs, senior programs, library and schools to serve residents of the two municipalities.

C. THE EXTENT TO WHICH THERE HAVE BEEN SIGNIFICANT CHANGES IN THE ASSUMPTIONS, POLICIES AND OBJECTIVES FORMING THE BASIS FOR THE MASTER PLAN AND DEVELOPMENT REGULATIONS SINCE LAST REVISED.

Although many of the goals and objectives identified in 1999 continue to guide the work of the Planning Board, the following issues have emerged as having special significance for future efforts.

1. COMMUNITY CHARACTER

Scarce developable land has lead to "teardown and re-build" and renovation of the existing housing stock becoming the dominant home construction activity in Chatham Township. This can have dramatic effect on the "character" of neighborhoods dominated by homes originally constructed in 50s, 60s and 70s both due to the style and size of the new and remodeled homes, as well as the destruction of mature vegetation during the construction process. Of particular concern is the prospect of continued loss of historic homes to the wrecking ball. The Planning Board has proposed regulations to harmonize the introduction of larger homes on existing developed lots, but the lack of any prohibition of demolition of historic buildings is troubling, as 3 homes on the historic building inventory have been lost in recent years. The effectiveness of these regulations will be monitored and revised as necessary over the coming years.

2. HIGHLANDS WATER PROTECTION AND PLANNING ACT

Chatham Township is one of 6 Morris County municipalities that are in neither the *Planning Area* nor the *Preservation Area* designated in the Highlands Water Protection and Planning Act enacted by the State Legislature in 2004. Although the *Highlands Regional Master Plan* has not yet been published, Chatham Township may be seen (unofficially) as a potential target for growth in northern New Jersey. The Township should closely examine the potential impacts as development is channeled away from the Highlands *Preservation Area* which may accelerate the renovation and tear down-rebuild phenomenon. Production builders, who previously built only on greenfields, may now looking to the existing housing stock to provide vacant lots for new construction.

3. STATE DEVELOPMENT AND REDEVELOPMENT: PLAN ENDORSEMENT

Chatham Township submitted its current *Housing Element and Fair Share Plan* to COAH in December 2005 and is currently awaiting that agency's compliance report. Once substantive certification is granted, the Township will begin the Initial Plan Endorsement process. COAH'S

Third Round rules (N.J.A.C. 5:94-2.3), require a municipality to seek Plan Endorsement from the State Planning Commission within three years from the date of substantive certification.

4 TRANSPORTATION

Coordination with the Morris County planning officials must be maintained to ensure consistency between future improvements to County roads within the Township and the objectives of the Township's Circulation Plan Element of the 1999 Master Plan Chatham's place in the regional transportation network was succinctly described in the 1999 Master Plan's Circulation Element as follows:

"For the most part the Township is served by a connector road system consisting largely of County operated, two-lane roadways which lead to the major regional highway network. Access to this highway network, in many instances, involves travel through built-up, congested areas, both residential and commercial. The Township itself is a corridor community and, as such, is concerned about maintaining an adequate circulation system in order to safely and efficiently accommodate present and future traffic. At the present time, major roads in the Township are used as a means of access between other communities and employment centers located beyond the Township in all directions." (Emphasis added.)

In addition, the North Jersey Transportation Planning Authority's current Regional Transportation Plan entitled Access & Mobility 2030, projects that automobile and truck traffic, measured as "vehicle miles traveled" (VMT), will increase 25 percent over current levels by 2030. The Township must maintain awareness of developments in the broader region and their impact on residents.

5. AFFORDABLE HOUSING STRATEGIES

The COAH process is designed to assure the production of some measure of housing that is affordable to low- and moderate-income household. However, economic and market forces in Chatham Township and throughout the region are pushing the price of a typical home ever higher, eroding the availability of housing that is affordable to middle-income households. Ways and means of ensuring a diversity of housing that is affordable to all income levels represented in the Township should be implemented where feasible.

D. RECOMMENDED CHANGES TO THE MASTER PLAN AND LAND USE ORDINANCE

MASTER PLAN RECOMMENDATIONS

1 Update Statement of Goals and Objectives

Building upon the longstanding objectives of ensuring the continued viability of the Township's single-family residential character, conserving natural resources and enhancing its open space

system and recreational facilities, the Planning Board proposes an updated statement that reflects the Township's current goals and objectives. This new goal statement emphasizes the importance of protecting community character through appropriate regulatory controls; enhancing the historic and cultural buildings and places within the Township, protecting and preserving open space and remaining farmland; providing housing opportunities for all ages and income levels; and implementing a circulation network for pedestrians and bicyclists within the Township and linked to key locations beyond the municipality's borders. An updated summary of Chatham Township's planning goals and objectives is included as Appendix A.

2. Update Open Space Element and Walkway/Bikeway Plan

This Reexamination Report recommends the Open Space Element be updated to assess progress achieved since the 1999 Plan. This would present an opportunity to work with PSE&G to bring about full implementation of that section of the Heritage Greenway situated within the utility easement. The Walkway/Bikeway Plan should also be updated, and should provide a long-term strategic implementation plan.

3. Update Circulation Plan

Balancing the need to accommodate increased traffic volumes on the Township's streets with maintaining community character should be a key focus of an updated *Circulation Plan Element*. This *Reexamination Report* recommends the Circulation Element be updated to ensure that earlier recommendations have been accomplished or remain feasible. Such an analysis will also provide the Planning Board an opportunity to ensure pedestrian and bikeway facilities are incorporated where appropriate and evaluate the impact from such improvements on the quality of life of Township residents and businesses. Consideration should be given to appropriate traffic calming techniques to protect neighborhood character and improve safety.

4. Update Historic Site Inventory and Evaluate Landmark Designation/Historic Districts

Incentives for demolition of historic structures have become increasingly strong, due to the diminishing availability of vacant residential lots and the desirability of the Township Several historic homes have already been lost. The Historic Preservation Plan should be updated and should explore the range of techniques that can be effectively used to protect these cultural resources.

5 Evaluate Special Planning Areas and Issues

A series of areas merit further consideration, both to assess the appropriateness of current zoning and to determine whether preservation should be pursued. Some of these areas include:

Giralda Farms Rolling Knoll Landfill Hillside Avenue/North River Road South River Road area Green Village area Areas of severe steep slope Loantaka Plain

6 Expand shared services initiatives

Expanding initiatives at the State and county level have emerged as the value of sharing services is seen in cost control and increased efficiency. The Chathams have been leaders in partnering to provide a variety of community services and facilities, and the Township should continue to aggressively pursue an expanded range of cooperative efforts, with the Borough and other neighbors, and should participate fully in the current initiative by Morris County to coordinate greater cooperative and shared arrangements

In an effort to improve inter-municipal cooperation, the Southeast Morris League for Strategic Solutions (SEAMLESS), a non-profit organization created "to promote a regional approach to understanding, addressing and mitigating adverse development impacts", encourages timely analysis of impacts and planning and cooperation among all the affected communities and major developments through educational outreach

7 Expand sustainable land use and management practices

The 2005 Conservation Plan recommended a series of initiatives, including:

- a Reexamination of stream buffer requirements and development of environmental restoration or improvement projects on public and private lands
- b Encourage land acquisition and expanded conservation easements to provide open space access to a connected system of Greenways, and promote forest management awareness.
- c. Improve pollution avoidance through enhanced stormwater management. Explore pesticide & fertilizer regulations and assess septic system impacts on ground water quality.
- d. Reduce auto emissions and reliance on automobiles by linking parks, open spaces, and commercial areas with walkways, bikeways, and multi-purpose trails as well as bike racks and pedestrian amenities. Promote walking to school
- e Improved energy efficiency and cost savings can be achieved at public facilities. Municipal and school facilities can help set an example through use of energy efficient lighting, repair and replacement of HVAC systems, coordinated purchasing and the use of hybrid or other highly efficient vehicles into the municipal fleet.
- f Promote public education offerings and public school curricula on sustainable lifestyle choices, and how they affect the quality of indoor and outdoor environments, including use of sustainable chemical substances (i.e.-cleaning agents, pesticides, fertilizers, etc) and sustainable application according to best management practices.

g. Protect the Township's scenic character attributes, including natural and cultural assets.

ORDINANCE RECOMMENDATIONS

1. <u>Residential Infill Standards.</u> Ordinances regulating the width of homes constructed and the size of corner lots have been introduced to address some of the issues regarding the preservation of neighborhood character in the renovation and re-construction of existing homes within the R-3 Zone.

A related issue is the preservation of mature vegetation in existing neighborhoods and all Zones. Consideration should be given to establishment of requirements that a landscape assessment be conducted prior to issuance of a demolition permit, and that a lot landscape plan be required as part of the lot grading plan for home renovations and "tear-down — rebuild" projects, including specifications for new or additional landscaping. Appendix B is an outline for a draft ordinance to address landscape assessment and remediation.

2. Co-location for Telecommunication Towers/Antennas.

The present Land Development Ordinance permits cellular towers in the A-H Affordable Housing zone district as a conditional use and in the PI-1 Professional and Institutional District also as a conditional use but limited to "secondary uses on municipal properties". The Ordinance provides standards for cellular towers in §30-99.9 including a restriction against towers within 100 feet from any residential district creating an obvious conflict with regard to such a use in the AH zone. The AH zone should be studied to determine if it remains a suitable location for cellular towers and, if so, an exemption to the distance requirement regarding residential zones should be modified accordingly. Another standard requires "appropriate screening and buffering ... to reduce the visual impact of the tower and ancillary structures." This provision should be revised to include more specific requirements for landscape buffers, equipment compound screening, noise abatement, site access and ultimate tower removal, in the cases where such facilities are The Planning Board does not recommend expanding the areas where wireless telecommunications equipment can be erected or installed, but rather the requirement for use variance approval is seen as the most effective forum for addressing the concerns of interested parties. The Township should also encourage the use of emerging technologies to minimize the visual impacts of telecommunications equipment in residential districts.

3. <u>Implement Conservation Plan Strategies</u>

A number of the strategies set forth in the June 2005 Conservation Plan may require amendments to the Land Use Regulations. These include:

a. Useable lot area requirements.

Evaluate the use of natural resource factors (steepness, wetlands, buffers, etc.) to determine the appropriate scale of development on a given site, in addition to, or in lieu of, a fixed area requirement for useable lot area as appropriate for each zone in the Township.

b. Lot size averaging requirements.

Develop design standards and other ordinance modifications to ensure that the protection of steep slopes and other environmentally critical areas is not compromised when lot size averaging is employed in development or subdivision applications

c. Impervious coverage regulations.

Develop revisions or amendments to impervious coverage regulations in each zone district to ensure consistency with the objectives of the NIDEP and Township stormwater regulations. Explore options for parking lets-tolots to be semi-impervious wherever possible

d Overlay zoning.

Assess the need for and application of overlay zoning for steep slopes, aquifer recharge areas, stream buffers and greenways as a mechanism for implementation of other Township goals including the Municipal Stormwater Management Plan Element of the Master Plan.

e Conservation easement tracking.

Create a standard conservation easement tracking and monitoring system to be part of the responsibilities of the township administration, in order to monitor conservation easements.

E. RECOMMENDATIONS CONCERNING REDEVELOPMENT PLANS

Chatham Township does not have, nor proposes, any designated redevelopment areas pursuant to the Local Redevelopment and Housing Law

Appendix A Chatham Township's Master Plan Goals and Objectives

- 1. Protect and restore our environment, specifically sensitive areas such as steep slopes, wetlands, streams, buffers, and flood plains as well as mature native vegetation, groundwater and air quality.
- 2. Protect the quality and quantity of groundwater and surface waters, including the Passaic River and the tributaries that feed the Great Swamp through the proper management of aquifer recharge areas, wetlands and their transition areas and groundwater aquifers.
- 3. Promote development and redevelopment of desirable retail and service uses and attractive buildings and landscaping to make the Business District more vital, accessible and pedestrian-friendly.
- 4. Preserve open space for passive and active recreation and to protect scenic vistas.
- 5. Preserve desirable community and neighborhood character by managing the scale of new and expanded buildings and alterations to their landscapes.
- 6. Promote a balance of housing types for all segments of the population.
- 7. Establish a Greenway system incorporating public and private open spaces and connect the Greenway with a pedestrian- and bicycle-friendly system of streets, sidewalks, paths, and bikeways to reduce traffic, ensure the safety of our children, increase the enjoyment of the walking and cycling public, and improve air quality
- 8. Preserve links to our history and heritage by preserving the historic areas in the Township and promoting awareness of historical homes.
- 9. Protect and maintain the remaining rural character and significant cultural and natural landscapes and identify and protect scenic vistas.
- 10. Limit development to densities and intensities that will retain the remaining natural areas of the Township and protect sensitive environmental areas.
- 11 Promote sustainability in all public and private development by encouraging the use of conservation-based land and building design techniques that result in energy and water conservation and minimize the impact of development on the environment.
- 12. Avoid the need to exercise eminent domain and, if condemnation is unavoidable, utilize fair market values to compensate any condemned properties as required by US and state law.

Appendix B

Chatham Township Master Plan - Implementation Strategies

- 1. Promote the development of an attractive, accessible, pedestrian friendly Business District with a balance of highly desirable retail establishments.
 - Implement a comprehensive streetscape plan (trees, lighting and street furniture) for the streets in and around Hickory Tree by working with the Township Committee, JCP&L, and the Tree Commission. Pursue possible grants.
 - Develop a plan to promote safe pedestrian access between shopping malls, surrounding businesses, recreational areas and residences, utilizing corner and mid-street crosswalks
 - Encourage development of mini-parks that provide outdoor gathering spots.
 - Implement the Heritage Greenway to provide pedestrian access to the Business District
 - Redefine/clarify the uses permitted in the business and professional/institutional districts to expand the number and variety of retail establishments to include fine restaurants coffee shops, music venues and upscale shops
 - Implement the Hickory Tree Greenbelt to demarcate the Business District from the surrounding residential areas.
 - Permit residential units in the Business District.

2. Preserve open space for use in passive and active recreation, and vistas.

- Protect existing open space through donated land, easements, or outright purchase bordering the Heritage Greenway and Hickory Tree Greenbelt.
- Promote the establishment of conservation easements wherever possible on <u>properties on properties</u> bordering the Heritage Greenway and Hickory Tree Greenbelt.
- Encourage applicants to use creative planning techniques that cluster development and leave protected open space.
- Preserve agriculture as a way of life in Chatham Township where it exists.

3. Protect our environment, specifically sensitive areas such as steep slopes, wetlands, streams, buffers, and flood plains as well as our mature vegetation, groundwater and air quality.

- Create greenways along feeder streams to the Great Swamp, including tributaries of the Loantaka and Black Brooks through buffer easements.
- Re-evaluate stream buffer widths.
- Encourage/require use of Best Management Practices for new development and long term maintenance projects.
- Protect watercourses and wetlands though buffers protected by restrictive zoning and conservation easements.
- Limit development on steep slopes to prevent soil erosion, unsafe and difficult to maintain steep driveways and roads, and lots which are unsuitable for family activities through restrictive zoning, conservation easements, land donations, and innovative planning techniques such as clustering and lot-averaging.

- Educate the public to be better stewards of our resources (better lawn care techniques, keeping toxins and waste out of the sewers, improved quality of runoff into the streams, rivers, wetlands, and woods).
- Establish maximum principal structure coverage (as opposed to sliding scale based on percentage) for homes in steep slope areas.

4. Protect and develop different neighborhood characteristics and ensure a balance of housing types for all segments of the population.

- Develop a Community Design element for the Master Plan with housing scale criteria to ensure that new and re-built homes fit into the character of existing neighborhoods and provide adequate light, air, and privacy
- Insure availability of moderate priced housing.
- Preserve the ¼ acre zones that presently exist in Chatham Township.
- Research lots in the Township that are potentials for tear down and/or could be subdivided, and evaluate the tradeoffs between one large home versus two somewhat smaller homes.
- Evaluate use of Floor Area Ratio (FAR) with a cap for controlling scale in teardown/rebuild cases to modulate changes to the character of existing neighborhoods.
 Evaluate a change in zoning to permit open front porches in the front yard setback in existing homes.

5. Preserve our link to our history and heritage by preserving the nature of historic areas in the Township and providing awareness of historical homes.

- Provide plaques for historical homes.
- Educate the public about historic landmarks and buildings.
- Create incentives that encourage preservation with historically correct renovation, rather than replacement, of historic buildings.
- Identify State and Federal resources that support historic preservation.

6. Create a pedestrian- and bicycle-friendly system of streets, sidewalks, paths, and bikeways to reduce traffic, ensure the safety of our children, increase the enjoyment of the walking and cycling public, and improve air quality.

- Connect municipal parks, recreation areas, schools, shopping and other areas of interest via trails bikeways and sidewalks
- Develop bike routes throughout town by painting lanes and using signs.
- Install sidewalks along both sides of all heavily traveled roads and require installation of sidewalks for all new construction along these roads.
- Require easements for bikeways and/or pathways in new developments.
- Provide mid-street crossing areas for pedestrian access to downtown businesses and recreational areas.
- Reduce elementary school walking distances that qualify for bussing and add crossing guards where needed to encourage walking and biking.

7. Develop specific goals and strategies to meet the recreational needs of the community.

APPENDIX B SINGLE FAMILY DWELLING LANDSCAPE AND LAND DISTURBANCE PLAN

1. Preservation of Existing Trees and Vegetation Mitigation for Removal

- (A) Tree Survey/Plan Requirement. Developers of new or replacement homes or additions exceeding 50% of existing floor area shall submit an existing tree survey and preservation plan to show compliance with these guidelines and standards. The extent of the survey required shall be determined by staff.
- (B) Tree Preservation. On sites with existing, mature trees, significant trees shall be preserved or transplanted on site, to the maximum extent practicable, to act as buffers and as site amenities. For purposes of this section, "significant" trees include the following:
 - (1) Deciduous trees with twelve inch (12") minimum caliper;
 - (2) Evergreen trees twelve feet (12') or more in height; or
 - (3) Groups or stands of ten (10) or more trees with a minimum caliper of six inches (6")
- (C) Mitigation Prior to issuance of a Certificate of Occupancy, trees that cannot practicably be preserved or transplanted may be required to be replaced according to the Tree Replacement standards in subsection D below.
- (D) Tree Replacement. If a significant tree designated to be preserved is removed or substantially damaged during clearing, grading, or construction, the developer shall replace the removed or damaged tree with new trees. Replacement trees shall be the same or similar species to the trees removed or damaged, or alternately a species native to Chatham Township and approved by the Township. For every one inch (1") of tree caliper removed or damaged, the applicant or developer shall:
 - (1) install two inches (2") of replacement tree caliper; or
 - (2) with the Township's concurrence, contribute an equivalent sum to the Township tree replacement fund
- (E) Tree Protection during Construction:
 - (1) significant trees shall be protected during construction with the erection of barrier fencing.
 - (2) grading shall be avoided within the root area or drip line of any existing preserved trees

2. Land Disturbance (Grading and Retaining Walls)

(A) Intent - Wherever possible, new development should respect and maintain the natural topography on a site through sensitive site organization and minimizing land disturbance. Extensive grading or unusual site improvements (e.g., large retaining walls) to force a preconceived design onto a particular piece of property is strongly discouraged. Modifying the design of a proposed dwelling to fit the site is encouraged to reduce potential environmental problems and an improved level of visual interest and variety.

(B) Design Guidelines and Standards

- (1) Prior Approval of Land Disturbance. Where significant topographical issues are identified (for example, substantial differences in grade on site), the Township may require the applicant to submit a preliminary grading plan. As applicable, no grading, excavation, or tree/vegetation removal shall occur on a site, whether to provide for a building site, for on-site utilities or services, or for any roads or driveways, before the Township's approval of a preliminary grading plan.
- (2) Respect the Natural Topography. To the maximum extent feasible, the layout of developments shall follow and respect the natural topography of the site. Berms, channels, swales, and similar man-made changes to the landscape shall be designed and graded to be an integral part of the natural landscape and to provide a smooth transition in changes of slope.
- (3) Limits on Graded or Filled Man-Made Slopes. The maximum slope of any man-made slope shall be 3:1. Retaining walls shall comply with the requirements for retaining walls set forth below.
- (4) Site Drainage Patterns. Site drainage patterns shall be designed to prevent concentrated surface drainage from collecting on, and flowing across pedestrian paths, walks, and sidewalks.

(C) Retaining Walls.

- (1) Use of retaining walls is encouraged to reduce the steepness of man-made slopes and to provide planting pockets or terraces for revegetation and landscaping.
- (2) Retaining walls may be permitted to support steep slopes but shall not exceed four feet (4') in height from the finished grade.
- (3) Terracing shall be limited to three tiers. The width of the terrace between any two 4-foot retaining walls shall be a minimum of four feet (4') with a maximum slope of 4:1. Terraces created between retaining walls shall be permanently landscaped and/or revegetated.
- (4) Retaining walls shall be stacked natural stone or faced with stone or earth-colored materials, or a material compatible with the primary building materials. Railroad ties, timber, and gabion-type retaining walls are prohibited.

