

MASTER PLAN AMENDMENT AND RE-EXAMINATION REPORT

INTRODUCTION

This Re-examination Report is required to conform to the following provisions of the Municipal Land Use Law: NJSA 40:55D-89.

- A. Identify the major problems and objectives relating to land development at the time of the adoption of the last Master Plan.
- B. Discuss the extent to which such problems and objectives have been reduced or have increased subsequent to such date.
- C. Discuss the extent to which there have been significant changes in 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 and energy, collection, disposition and recycling of designated recyclable materials, and changes in State, County and Municipal policies and objectives.
- D. Outline the specific changes recommended for the Master Plan or development regulations, if any, including underlying objectives, policies and standards, or whether a new plan or regulations should be prepared.

This report also serves as an amendment to the Master Plan of 1990, the Master Plan Amendment of March 9, 2004 and the Regional Center Master Plan Amendment dated September, 2004 prepared by Heyer & Gruel, P.A.

**OBJECTIVES
IDENTIFIED IN THE
1990 BRIDGEWATER TOWNSHIP MASTER PLAN
1996 RE-EXAMINATION REPORT
MARCH 9, 2004 RE-EXAMINATION REPORT & MASTER PLAN AMENDMENT
AMENDMENTS TO THE MASTER PLAN SEPTEMBER, 2004**

DENSITY AND DISTRIBUTION OF POPULATION

TO PRESERVE THE DEVELOPMENT CHARACTER AND QUALITY OF BRIDGEWATER TOWNSHIP (1990 MASTER PLAN)

Extent that the objective has increased or decreased as a municipal concern:

The objective remains as a strong municipal concern. Maintaining the unique image and preserving the character of the individual neighborhoods are primary objectives. Bridgewater Township desires to maintain and improve residential neighborhoods without undue intrusion from traffic, noise, light and degraded air quality.

Extent to which there have been significant changes in assumptions/policies:

As reported in the 1996 Master Plan Re-examination Report, there was a shift in focus from the non-residential corporate use to the large scale retail use. Over the intervening years, the vision has been implemented in several developments including the American Cyanamid and Harris Semiconductor facilities and most recently in the approval of an expansion of the Bridgewater Commons and construction of the associated new Lifestyle Retail Center at the Bridgewater Commons.

Bridgewater recognizes the need for greater efficiency in the use of land devoted to retail. While retail opportunities may grow, the Township adopts the policy that review of such uses must include the evaluation on a broader spectrum. This is needed to assure that the retail use does not negatively affect the quality of life enjoyed by the surrounding neighborhood and by the Township as a whole.

In the 1996 Master Plan Re-examination Report, it was recommended that senior citizen developments, including nursing homes, assisted living facilities, continuing care retirement communities and congregate care facilities be permitted in residential zones when lots have frontage on Route 202-206 or Route 28. The development of senior citizen facilities along

the corridor has been the subject of a Master Plan Re-examination Report adopted in the spring of 2004. As a result of a shift in policy, the Master Plan Re-examination Report eliminated these uses.

SAFEGUARD THE TAX BASE, PROVIDE FOR A CONTINUING EMPLOYMENT SOURCE AND TAX RATABLES THROUGH APPROPRIATE USE OF NON-RESIDENTIAL LANDS. (1990 MASTER PLAN)

Extent that the objective has increased or decreased as a municipal concern:

The objective has not increased or decreased as a municipal concern.

Extent to which there have been significant changes in assumptions/policies:

As noted in the 1996 Master Plan Re-examination Report, there are several projects which were contemplated as advancing the tax base and providing for employment. There are no changes in assumptions or policies.

The 1996 Master Plan Re-examination Report recommended that zoning for the Arbor Glen Continuing Care Community be expanded. The MPD zone standards would be used for such expansion.

This re-zoning was adopted which paves the way for support services associated with the needs of the seniors and the long-term need for all Bridgewater residents.

LAND USE

LAND USE ELEMENT AMENDED TO CHANGE DESIGNATION OF FORMER VILLA RESTAURANT (CURRENT RARITAN PLAZA) FROM COMMERCIAL TO MIXED USE. (MASTER PLAN AMENDMENT SEPTEMBER 1994)

Zone amendment was adopted and places this property in the C-4 zone.

LAND USE ELEMENT AMENDED TO CHANGE DESIGNATION OF FOUR PROPERTIES LOCATED ON CHIMNEY ROCK ROAD AND WASHINGTON VALLEY ROAD BETWEEN THE LOFT TRACT AND THE C-1 ZONE FROM SINGLE-FAMILY RESIDENTIAL TO MULTIFAMILY. (MASTER PLAN AMENDMENT SEPTEMBER 1994) THE 1996 MASTER PLAN RE-EXAMINATION REPORT AMENDED THE MASTER PLAN TO CHANGE THE LAND USE FOR THE CHIMNEY ROCK ROAD AREA, NORTH OF THE LOFT TRACT AND NORTH OF FIELDSTONE LANE TO PERMIT PROFESSIONAL OFFICE DEVELOPMENT.

This was implemented. The east side of Chimney Rock Road is zoned C-3B at the location of the new medical center. The multifamily use is located on the Loft farm.

LAND USE ELEMENT AMENDED TO CHANGE DESIGNATION OF PROPERTIES LOCATED SOUTH OF SOUTHSIDE AVENUE AND EAST OF LOESER AVENUE FROM INDUSTRIAL TO RESIDENTIAL. (MASTER PLAN AMENDMENT SEPTEMBER 1994)

This zoning amendment was adopted (R-10).

LAND USE ELEMENT AMENDED TO CHANGE DESIGNATION OF A PORTION OF THE CALI PROPERTY LOCATED ON FRONTIER ROAD FROM RESIDENTIAL TO COMMERCIAL. (MASTER PLAN AMENDMENT JANUARY 1996)

This zone is now C-3. However, the lot is now bifurcated in its recommended land use. Recommendations to address this are provided in this document.

LAND USE ELEMENT AMENDED TO CHANGE DESIGNATION OF THE RCA/HARRIS SEMICONDUCTOR PROPERTY LOCATED ON ROUTE 202 FROM INDUSTRIAL TO MIXED USE. (MASTER PLAN AMENDMENT JANUARY 1996)

This zone was amended to M-1 Limited.

LAND USE ELEMENT AMENDED TO CHANGE DESIGNATION OF A PORTION OF THE AMERICAN CYANAMID/AMERICAN HOME PRODUCTS PROPERTY LOCATED SOUTH OF ROUTE 28 AND NORTH OF THE RAIL LINE FROM OFFICE/INDUSTRIAL TO MIXED USE. (MASTER PLAN AMENDMENT APRIL 1996)

This zone is now the PRCPD zone which is consistent with the Master Plan Amendment.

ENCOURAGE THE RE-DEVELOPMENT OF LARGE INDUSTRIAL TRACTS WHICH ARE NO LONGER VIABLE FOR INDUSTRIAL OR MANUFACTURING USES.

Central Jersey Industrial Park:

The Land Use Element Map of the Master Plan was amended to provide the following changes: Central Jersey Industrial Park from industrial to add a mixed use component. (1996 Re-examination Report)

The 1996 Master Plan Re-Examination Report recommended amendment to the Land Use Element of the Master Plan to provide a change in land use from industrial to mixed use. The Re-examination Report identified the Central Jersey Industrial Park as being a parcel size and suitable location where the structures were viewed as having greater tax base potential than what is predominantly found to be an industrial warehouse facility. The Re-examination Report suggests uses including commercial, recreational, entertainment as well as limited retail such as furniture or bedding sales in conjunction with a commercial mixed use development. The industrial park has received variance approvals to use some of its structures for uses such as health club, skating and a furniture/bedding retail sales facility. To ensure that the industrial park does not exacerbate existing levels of congestion, pollution and traffic in the Township, the existing footprint should be maintained by maintaining current existing density and building footprints.

Extent that the objective has increased or decreased as a municipal concern:

The objective has not increased or decreased as a municipal concern.

Extent to which there have been significant changes in assumptions/policies:

There have been no significant changes in assumptions/policies. This amendment has been adopted.

TO PROMOTE A WELL BALANCED VARIETY OF RESIDENTIAL, RECREATIONAL PUBLIC, COMMERCIAL, INDUSTRIAL AND CONSERVATION LAND USES. (1990 MASTER PLAN)

Extent that the objective has increased or decreased as a municipal concern:

The objective remains as a very strong municipal concern. Bridgewater Township residents have expressed the desire to conserve dwindling open space assets. The uses to which land may be used include conservation, open space and recreation. New recreational activities include a dedication for roller hockey and skating programs. The municipal objective of assuring abundant recreational opportunities has filtered into the private sector which has been able to offer programs such as ice skating and health clubs.

American Cyanamid Site:

The former American Cyanamid site is a site which holds great potential for recreational opportunities in the Township as well as the County. The Commerce Ballpark and retail

stores are up and functioning. Plans for the future of the remainder of the site include other recreational options.

Extent to which there have been significant changes in assumptions/policies:

The Township has increased interest in recreation targeted to the specific needs of residents, open space and conservation, including Pop Warner and lacrosse as well as soccer.

Bridgewater Township believes that part of the stewardship of conservation includes maintenance of land, assessment of the health of species, removal of forest floor fuel load and maintaining water quality in streams.

WITHIN THE LATITUDE AFFORDED BY THE AVAILABILITY OF VACANT LAND, TO GUIDE LAND DEVELOPMENT AND LOCATION OF COMMUNITY FACILITIES IN ORDER TO MEET THE NEEDS OF BRIDGEWATER TOWNSHIP RESIDENTS AND TO PROMOTE THE PRESERVATION OF THE NATURAL ENVIRONMENT. (1990 MASTER PLAN)

Extent that the objective has increased or decreased as a municipal concern:

The objective has increased as a municipal concern. There is a focus on providing a municipal complex to meet the needs of the Township.

Extent to which there have been significant changes in assumptions/policies:

Bridgewater Township Open Space and Park Boards have been actively analyzing municipal lands for possible Green Acres, Recreation and Open Space (ROSI) designation. In addition, there is a strong commitment to retain municipal lands unless there is a significant public benefit which would be met by the release of these lands. Additionally, consideration should be given to ways in which Bridgewater can preserve its dwindling stock of open space by encouraging the purchase of privately owned lands for preservation in a natural state.

CREATE A LINKAGE BETWEEN ARBOR GLEN AND THE OPEN SPACE LOCATED BEHIND THE SOMERVILLE ELKS PROPERTY ON ROUTE 28. THE TRAIL SHOULD BE MADE ACROSS WOODSIDE LANE AND UTILIZE OTHER PROPERTIES BEFORE CROSSING ADAMSVILLE ROAD. CARE IS NEEDED FOR THE CROSSING WHICH WILL INCLUDE SIDEWALKS, CROSSWALKS AND SIGNAGE. (1996 RE-EXAMINATION REPORT)

Extent that the objective has increased or decreased as a municipal concern:

The objective has not increased or decreased as a municipal concern.

Extent to which there have been significant changes in assumptions/policies:

There have been no significant changes in assumptions/policies.

COORDINATE FUTURE GROWTH WITH NEEDED EXPANSION OF PUBLIC FACILITIES AND SERVICES. (1990 MASTER PLAN)

Extent that the objective has increased or decreased as a municipal concern:

The objective has increased in municipal concern.

Extent to which there have been significant changes in assumptions/policies:

Shared Municipal Facilities:

The Township strongly supports a shared location for the Department of Public Works facility. This facility is in the design phase and will be located on Chimney Rock Road on a portion of the Stavola Quarry. The location will be shared with Somerset County and Bound Brook Borough, and possibly the Bridgewater Board of Education.

THE TOWNSHIP SHOULD EVALUATE THE SUFFICIENCY OF THE CURRENT MUNICIPAL COMPLEX LOCATED ON GARRETSON ROAD. ANY DECISION SHOULD CAREFULLY WEIGH THE ECONOMIC BENEFIT OF A MOVE WITH THE ADVANTAGE OF HAVING A FACILITY LOCATED IN THE CENTRAL PORTION OF THE TOWNSHIP. (1996 RE-EXAMINATION REPORT)

Extent that the objective has increased or decreased as a municipal concern:

The objective has increased as a municipal concern. The municipal complex should be kept in the general vicinity of this current location.

Extent to which there have been significant changes in assumptions/policies:

Township is continuing its investigation to site this facility at a location which is most suitable to the township.

CONTINUE TO PARTICIPATE WITH THE REGIONAL CENTER ADVISORY COMMITTEE TO PLAN AND IMPLEMENT IMPROVEMENTS ON A REGIONAL SCALE. ACTIVITIES WITHIN THE DESIGNATED CENTER BOUNDARIES SHOULD BE CONSISTENT WITH THE REGIONAL CENTER DESIGNATION REPORT AS ACCEPTED BY THE OFFICE OF STATE PLANNING. (1996 RE-EXAMINATION REPORT)

Extent that the objective has increased or decreased as a municipal concern:

The objective remains high in priority. The Bridgewater Regional Center Master Plan (Bridgewater RCMP) was prepared by Heyer, Gruel & Associates. The Planning Board extensively reviewed the Bridgewater RCMP, held several public meetings, made modifications based on Board and public input and adopted the Bridgewater RCMP on September 30, 2004.

Extent to which there have been significant changes in assumptions/policies:

The Planning Board endorses the position to reduce density in the area outside the Regional Center. The extent, manner and conditions of Bridgewater's participation in the Regional Center are set forth in the adopted Regional Center Master Plan and incorporated herein by reference.

MINIMIZE IMPACT TO BRIDGEWATER TOWNSHIP RESIDENTS FROM ALTERED AIR TRAFFIC PATTERNS AND/OR EXPANSION OF NEARBY AIRPORTS. (1996 RE-EXAMINATION REPORT)

Extent that the objective has increased or decreased as a municipal concern:

The objective has not increased or decreased as a municipal concern.

Extent to which there have been significant changes in assumptions/policies:

There are no significant changes in assumptions/policies.

WORK WITH WATER COMPANIES TO EXTEND PUBLIC WATER SYSTEMS. INCREASE THE NUMBER OF FIRE HYDRANTS AND THEIR PROXIMITY TO RESIDENTIAL POPULATIONS. (1996 RE-EXAMINATION REPORT)

Extent that the objective has increased or decreased as a municipal concern:

The objective has not increased or decreased as a municipal concern.

Extent to which there have been significant changes in assumptions/policies:

There have been no significant changes in assumptions/policies.

BRIDGEWATER TOWNSHIP SHOULD CONTINUE TO MONITOR ACTIVITIES AT THE STAVOLA QUARRY TO CONFIRM THAT OPERATION PROCEEDS WITHIN PRESCRIBED OPERATIONAL GUIDELINES PREVIOUSLY AGREED TO. (1996 RE-EXAMINATION REPORT)

Extent that the objective has increased or decreased as a municipal concern:

The objective has not increased or decreased as a municipal concern.

Extent to which there have been significant changes in assumptions/policies:

No significant changes in assumptions/policies.

HOUSING

HOUSING ELEMENT AND FAIR SHARE PLAN AMENDED TO ADDRESS THE AFFORDABLE HOUSING OBLIGATION AND COMPLIANCE. (MASTER PLAN AMENDMENT FEBRUARY 1995)

TO PROVIDE FOR AN APPROPRIATE SHARE OF THE REGIONAL NEED FOR LOW AND MODERATE INCOME HOUSING. (1990 MASTER PLAN)

Extent that the objective has increased or decreased as a municipal concern:

The objective remains as a strong municipal concern.

Extent to which there have been significant changes in assumptions/policies:

On June 7, 1995, The Council on Affordable Housing (COAH) granted Bridgewater Township substantive certification. This certification confirmed compliance to 1999. COAH has recently published draft methodology for Round 3 which addresses the future obligation. Bridgewater Township has constructed more than its required 'fair share' of affordable housing.

LIMIT THE DEVELOPMENT OF ANY ADDITIONAL HIGH DENSITY MULTI-FAMILY HOUSING DEVELOPMENTS UNLESS SUCH ARE DEDICATED FOR SENIOR CITIZEN HOUSING. (1996 RE-EXAMINATION REPORT)

Extent that the objective has increased or decreased as a municipal concern:

The objective remains an overall municipal concern.

Extent to which there have been significant changes in assumptions/policies:

Bridgewater has several nursing homes within its borders, including Arbor Glen, which provides a wide housing range from independent apartment living to beds within the Health Center, Bridgeway Convalescent Center, Integrated Health, Harborside Healthcare, and NJ Eastern Star Home. The Township has numerous senior citizen projects (62 years and older), including Arbor Glen, Centerbridge I, Centerbridge II, Autumn Woods, Avalon, Brandywine, Woodmont I and Four Seasons, and several senior group homes, including

Bridgeknoll I, Bridgeknoll II and Schaal House. The advantage is that residents who wish to have a lifestyle of association with their counterparts in age are able to remain in the Township in an area where their environment is suitable to their desires. To the extent that additional senior citizen housing is desired, adequate transportation options should be considered.

CIRCULATION

CIRCULATION ELEMENT AMENDED TO ADOPT THE MILLTOWN ROAD/VANDERVEER ROAD TRAFFIC IMPROVEMENT MASTER PLAN AS AMENDED BY TRAFFIC ENGINEERS ABBINGTON ASSOCIATES, MAY 17, 1994. (MASTER PLAN AMENDMENT SEPT. 1994)

CONTROL THE DESIGN OF MUNICIPAL STREETS TO ENCOURAGE ROADWAY CONNECTIONS RATHER THAN CUL-DE-SAC ROADWAYS. (1996 RE-EXAMINATION REPORT)

Extent that the objective has increased or decreased as a municipal concern:

The objective has not increased or decreased as a municipal concern.

Extent to which there have been significant changes in assumptions/policies:

There have been no significant changes in assumptions/policies.

THE PLANNING BOARD CONTINUES TO OPPOSE ANY CONNECTION OF FRONTIER ROAD TO FOOTHILL ROAD. (1996 RE-EXAMINATION REPORT)

Extent that the objective has increased or decreased as a municipal concern:

The objective has not increased or decreased as a municipal concern. The road is gated as an emergency access only.

Extent to which there have been significant changes in assumptions/policies:

There have been no significant changes in assumptions/policies.

CONTROL AND LIMIT NON-RESIDENTIAL AND COMMERCIAL TRUCK TRAFFIC FROM UTILIZING OR IMPACTING RESIDENTIAL STREETS. (1996 RE-EXAMINATION REPORT)

Extent that the objective has increased or decreased as a municipal concern:

The objective has increased as a municipal concern and is discussed in this Plan.

Extent to which there have been significant changes in assumptions/policies:

There have been no significant changes in assumptions/policies.

WORK TO ENCOURAGE ENHANCED PUBLIC TRANSPORTATION OPTIONS AND TO DECREASE SINGLE-OCCUPANCY VEHICLE TRIPS, PARTICULARLY DURING PEAK HOURS. (1996 RE-EXAMINATION REPORT)

Extent that the objective has increased or decreased as a municipal concern:

This objective has increased due to the vitality enjoyed at the Somerset County Ballpark and the active office and retail developments in the Township.

RE-NAME VARIOUS ROADS TO ELIMINATE THE POTENTIAL FOR ERRORS IN PROVIDING EMERGENCY SERVICES. (1996 MASTER PLAN)

Extent that the objective has increased or decreased as a municipal concern:

This issue has increased as a municipal concern due to the potential for confusion by emergency responders in locating residents' homes. See section on Traffic.

WORK WITH SOMERSET COUNTY AND NJDOT TO PROVIDE A GRADE-SEPARATED CROSSING AT CHIMNEY ROCK ROAD AND ROUTE 22. (1996 RE-EXAMINATION REPORT)

Extent to which there have been significant changes in assumptions/policies:

The Chimney Rock Road/Route 22 traffic control project is making progress and is in the engineering design stage.

IMPLEMENT A PEDESTRIAN AND BICYCLE-FRIENDLY CIRCULATION SYSTEM. (1996 RE-EXAMINATION REPORT)

Extent that the objective has increased or decreased as a municipal concern:

The objective has not increased or decreased as a municipal concern.

Extent to which there have been significant changes in assumptions/policies:

There have been no significant changes in assumptions/policies.

CONSERVATION OF NATURAL RESOURCES/ENERGY, PARKS & OPEN SPACE

TO PROMOTE THE CONSERVATION OF NATURAL SYSTEMS, ENVIRONMENTAL RESOURCES, RURAL APPEARANCE, AND THE NATURAL AMENITIES WHICH PRESENTLY CHARACTERIZE BRIDGEWATER TOWNSHIP. (1990 MASTER PLAN)

Extent that the objective has increased or decreased as a municipal concern:

The objective has increased as a municipal concern.

Extent to which there have been significant changes in assumptions/policies:

There have been no significant changes in assumptions/policies.

COMPLETE THE MIDDLEBROOK TRAIL, WHICH IS AN INTEGRAL PART OF THE WASHINGTON VALLEY OPEN SPACE SYSTEM. (1996 RE-EXAMINATION REPORT)

Extent that the objective has increased or decreased as a municipal concern:

The objective has strong municipal support. Construction of the trail has commenced since acquisition of several private properties. This is an ongoing initiative.

Extent to which there have been significant changes in assumptions/policies:

There have been no significant changes in assumptions/policies.

WORK WITH THE SOMERSET COUNTY PARK COMMISSION AND THE SOMERSET COUNTY PLANNING BOARD TO ESTABLISH A PUBLIC GREENWAY CORRIDOR ALONG THE RARITAN RIVER AND ITS TRIBUTARIES. (1996 RE-EXAMINATION REPORT)

Extent that the objective has increased or decreased as a municipal concern:

The objective has not increased or decreased as a municipal concern.

Extent to which there have been significant changes in assumptions/policies:

There have been no significant changes in assumptions/policies.

EXPAND OPPORTUNITIES FOR ACTIVE RECREATIONAL AREAS AT LOCATIONS WHICH CAN PROPERLY ACCOMMODATE THE REQUIRED PARKING AND OFFER ADEQUATE SCREENING AND PROTECTION FOR ADJOINING RESIDENTIAL PROPERTIES. (1996 RE-EXAMINATION REPORT)

Extent that the objective has increased or decreased as a municipal concern:

The objective has increased as a municipal concern. We should continue to explore public-private partnerships to improve recreational opportunities.

Extent to which there have been significant changes in assumptions/policies:

There have been no significant changes in assumptions/policies.

REVIEW THE ZONING MAP TO IDENTIFY PROPERTY, BOTH PRIVATE AND PUBLICLY HELD WHICH ARE LOCATED IN THE PUBLIC (P) ZONE. CONFIRM THAT SUCH LAND IS STILL REQUIRED FOR SOME PUBLIC PURPOSE. IF NOT, THOSE LANDS SHOULD BE RE-ZONED FOR DEVELOPMENT PURPOSES. PUBLICLY HELD LOTS SHOULD BE DISPOSED OF AS ALLOWED FOR BY LAW. (1996 RE-EXAMINATION REPORT)

Extent that the objective has increased or decreased as a municipal concern:

This action plan has increased in municipal concern and has been reconsidered.

Extent to which there have been significant changes in assumptions/policies:

As the township has matured, the amount of existing open space has declined dramatically, and the market value of real property has risen substantially. Maintaining the municipality's ownership of undeveloped land is therefore deemed a cost effective and essential component of the township's commitment to protecting the quality of life of all of Bridgewater's residents. Accordingly, developing any vacant or undeveloped municipality held land for uses other than parks, open space, recreational fields or some other public use should be discouraged. Consideration therefore should be given to add to the municipal open space when an opportunity arises.

BRIDGEWATER TOWNSHIP SHOULD WORK WITH SOMERSET COUNTY TO EXAMINE POTENTIAL LAND EXCHANGES WHICH WOULD BENEFIT BOTH ENTITIES. (1996 RE-EXAMINATION REPORT)

Extent that the objective has increased or decreased as a municipal concern:

The objective has not increased or decreased as a municipal concern.

Extent to which there have been significant changes in assumptions/policies:

There have been no significant changes in assumptions/policies.

RECYCLING PROGRAMS

A Leaf Bag Program is required, due to the new state Stormwater Management Regulations which were adopted in February, 2004.

CHANGES IN STATE, COUNTY AND MUNICIPAL POLICIES AND OBJECTIVES

Extent that the objective has increased or decreased as a municipal concern:

Home rule continues to be of heightened interest to the Township.

Extent to which there have been significant changes in assumptions/policies:

There have been significant changes in assumptions/policies which are primarily in the area of State-mandated affordable housing obligations, Residential Site Improvement Standards and State's regulations designed to protect environmental resources such as stormwater. Smart Growth policies have resulted in the development of a Regional Center of which Bridgewater Township is a participant. The extent, manner and conditions of Bridgewater's participation are set forth in the Regional Center Master Plan as incorporated by reference.

NEW MASTER PLAN

A new Master Plan is not warranted at this time; however, this Re-examination Report outlines goals and objectives. The Master Plan amendment deals with the pressing issues facing Bridgewater Township.

MASTER PLAN AMENDMENT

OVERVIEW

The Township of Bridgewater contains a total area of 32.5 square miles and a population of 42,950 according to the 2000 U.S. Census. The population increased by 10,431 residents or 32.1 percent between 1990 and 2000. Bridgewater can be characterized as a mature suburban community with a diverse land use pattern. The Township has been a major focus of growth in Somerset County and central New Jersey, with more than 4 million square feet of commercial and industrial space and thousands of new housing units constructed over the past decade. A portion of the Township is located within the Somerset County Regional Center, which also includes the boroughs of Raritan and Somerville.

Bridgewater is located in the path of development activity occurring in Somerset County and central New Jersey. With an expanding population and significant commercial development over the past decade, there is a significantly decreasing inventory of vacant (Class I) land in the Township. Within the Township, there are approximately 592 vacant properties, as identified by the Township Tax Assessor for 2004. This accounts for approximately 4.5 percent of the acreage of the municipality. This is a decrease in vacant parcels from 1,238 in 1996 and indicates that there is mounting development pressure on the remaining vacant land, and also pressure to develop underutilized land. The Township is likely to experience a slower rate of residential and commercial growth in the next ten years.

Bridgewater has been successful in maintaining distinct residential neighborhoods with a strong identity, well-established character and a desirable quality of life. The Township's land use pattern has also been influenced by the evolving transportation network that has shaped development from the railroads in Finderne that supported early industrial development to the State highway system which has promoted large-scale office and retail development. Other factors that have shaped land use patterns include geography, such as the Raritan River in Finderne and the Watchung Mountains in Martinsville.

The Township is distinguished by an intermingling of recent, large-scale and auto-oriented commercial uses and areas devoted to large, low-intensity commercial and industrial uses.

The functional center of Bridgewater includes a full range of land uses. Near the junction of several major highways is located the Bridgewater Regional shopping mall, a vocational-technical institute, county and municipal library, post office, health care facility, many Township community facilities, and a hotel and office development.

On the east is located the Finderne community, a mature residential area characterized by more established residential neighborhoods. The Finderne community is bordered by industrial areas and the sites of redevelopment projects, such as the Commerce Bank Ballpark and the Bridgewater Promenade, a large retail center. The western portion of Bridgewater is characterized by large, campus-style employment centers lining Routes 22 and 202 as well as extensive postwar-style suburban housing developments and a large retail center along Route 202.

Parks and open space are scattered throughout Bridgewater. Opportunities for additional open space exist along Bridgewater's borders, many of which are formed by bodies of water, along the many creeks that flow through the Township and along the slopes of the Watchung Mountains.

Bridgewater's roadway system consists of several interstate highways as well as State and County roads which connect residential neighborhoods with employment and shopping centers. The Township functions as a "crossroads" of central New Jersey with more significant pass-through traffic on Routes 287, 22, 202, and 206. The Raritan Valley train line stops in the Finderne and East Gateway sections of Bridgewater.

GOALS AND OBJECTIVES

OVERALL

The Township should contain further development, control density, protect existing open space and actively pursue opportunities to enhance Bridgewater's quality of life.

LAND USE

- A. Provide a balanced land use pattern in the Township of residential, commercial, limited industrial, public/semi-public, conservation, and parks/open space uses that supports residential neighborhoods.
- B. Maintain and strengthen existing commercial districts, preserve some remaining industrial areas, increase parks, recreation and open space where appropriate, protect environmentally-sensitive natural features, accommodate community facilities, and facilitate local/regional circulation without placing undue demand on infrastructure and local roads.
- C. Continue to permit development within existing zones where there is infrastructure, intermodal access and an established pattern of development. Discourage intense uses and modify zoning to protect neighborhoods and environmental assets.
- D. Preserve and enhance the residential character of the Township by protecting established neighborhoods, addressing quality of life issues, promoting a diversity of housing choices, providing for compatible in-fill housing where appropriate, and planning for appropriate development in targeted revitalization areas where land uses are in transition. (In-fill development is development of vacant lands which meet the zoning regulations of the Township.)
- E. Continue to monitor and address the State of New Jersey Council on Affordable Housing (COAH) fair share housing obligations.
- F. Encourage appropriate development of land use focus areas in the Township that will, within the limits of zoning, return underutilized land to productive use, generate economic development activity, diversify the municipal economic base, create new employment opportunities, and strengthen the tax base.
- G. Any construction in the area of the Bridgewater Commons Mall, the Township's Municipal Complex, and the remaining office buildings in the Somerset Corporate Center, should include

improved connections, balanced intermodal access, and streetscape improvements to create a sense of place and enhance community design.

- H. Maintain and expand the Township's existing system of parks, recreation and open space in order to meet the recreation needs of our population, acquire additional open space, and provide for an interconnected network of parks, greenways, conservation and open space.
- I. Encourage the retention of existing light and high technology industrial uses with an emphasis on industrial clusters found in the region such as pharmaceuticals, bio-medical research and life sciences. This should include compliance with all state, local and federal environmental regulations.
- J. Encourage land conservation and stewardship of the various options for public open space planning as a means of shaping development patterns, protecting environmentally-sensitive critical areas and facilitating the creation of a greenbelt through and around the Township.
- K. Coordinate public uses and facilities with future growth in the Township's multiple neighborhoods and commercial districts to ensure an adequate distribution of municipal services. Address the Township's need for municipal facilities.
- L. Continue Township support for the Regional Center as a means of promoting the improved residential quality of life in the manner, under the conditions, and with the intent set forth in the Bridgewater RCMP, which has been incorporated by reference.
- M. Consider opportunities for expanded inter-local agreements, regionalization of services and pooling of resources to address issues of common concern and economy-of-scale savings.
- N. Transit-oriented site layout should be encouraged, particularly within the Regional Center.
- O. Require aesthetically pleasing land use design that prefers subtle character in site appearance, particularly along major corridor routes.
- P. Prepare community development plans for the major neighborhood business centers in the District including Main Street in Finderne and Old York Road in Bradley Gardens. Such plans should address major planning/zoning and design issues. Incorporate permitted land uses, bulk standards, potential in-fill development locations, community design and architecture and public improvements such as parking and streetscape upgrades.
- Q. Develop criteria to accommodate wireless telecommunication facilities.
- R. Establish suitable locations for senior citizen housing in a low-rise setting.

- S. Continue to address the Township's need for an expanded, renovated or new municipal complex.
- T. Bridgewater wishes to modify its visual appearance. The high rise buildings are not in keeping with the subtle suburban image it wishes to promote. Therefore, it is recommended that building heights be significantly reduced in order to establish a low profile going forward.

PARKS, RECREATION, AND OPEN SPACE

- A. Monitor the inventory of recreation facilities to ensure that adequate passive and active recreation areas are available throughout the Township.
- B. Maintain, preserve, and enhance the quality of existing parks and recreation parcels within the Township, recognizing the unique assets of the individual parcels for use by the residents.
- C. Continue to acquire additional properties as identified by the Township Open Space Advisory Committee and Township Council through funding sources such as the Township and County Open Space Trust Fund.
- D. Pursue funding through Federal, State, and County agencies to help acquire, maintain and improve recreation and open space facilities. Work with non-profit organizations and private property owners to acquire deed restrictions and conservation easements for open space.
- E. Utilize the parks, recreation, and open space standards of the New Jersey Department of Environmental Protection Green Acres Program to evaluate the adequacy of the Township's existing system and work to address recreation and open space needs in under-served areas and neighborhoods.
- F. Utilize the Regional Center process as a means to improve and create parks and open space areas within the Township and other member communities. Provide an interconnected greenway and pedestrian network, where feasible.
- G. Where appropriate, incorporate parks, recreation and open space into sites including the East Gateway and the Chimney Rock Road corridor.
- H. Undertake neighborhood-based planning initiatives to address parks, recreation, and open space needs.
- I. Work with the County to implement the Raritan River Greenway and branch greenways to increase parks, recreation, and open space, for animal habitats and for connection with other communities.

- J. Incorporate parks, recreation, open space, and greenway systems into areas such as the Bridgewater Core and East Gateway.
- K. Pursue inter-local agreements, cost-sharing, and pooled funding with Somerville, Raritan, and other adjacent municipalities, to implement parks, recreation, and open space opportunities.
- L. Increase access to funding from the County Open Space Trust Fund and New Jersey Department of Environmental Protection Green Acres Program for park maintenance, improvements, and creation of new facilities.
- M. Establish pedestrian linkages between schools, community facilities, neighborhood areas, and downtown commercial cores, and park lands.
- N. Link the parks, recreation, and open space in the Regional Center area of the Township with those outside the Regional Center.

CIRCULATION

- A. Ensure that the transportation services are safe and readily accessible.
- B. Undertake land use and transportation planning at the same time as development application review so that the planning that occurs is comprehensive in nature. Utilize traffic impact assessments to evaluate build-out analyses in order to determine the effect of land use plans on the movement of goods, people, and potential traffic problems.
- C. Promote and enhance all types of transportation infrastructure and services such as walking, bicycling and ride sharing prior to pursuing capacity increasing projects.
- D. Design and construct the transportation infrastructure with the improvements targeted to provide safe movement of people and goods.
- E. Evaluate and control the appropriate speed limit on streets by applying Enforcement, Education and sound Engineering design for traffic calming strategies.
- F. Plan for major uses and their access to utilize roadway classifications that meet the largest volumes of traffic (i.e., the arterials and major collectors). These uses should not access local roadways, or roadways under the jurisdiction of the State of New Jersey and/or Somerset County that go through residential neighborhoods.
- G. Seek to improve facilities for increased service for the residents who would benefit from such rail service.

- H. Provide the residents with alternative means of transportation, such as multi-use trails. Work with the County to offer jitneys, which would provide linkages to places of interest.
- I. Evaluate and update the functional classification of the Regional Center's system of roadways and streets and identify and implement capital improvements and regulatory mechanisms needed to enable the system to function as intended and meet existing and future needs.
- J. Develop and implement a comprehensive plan for accommodating travel by bicycling and walking throughout Bridgewater Township.
- K. Develop and implement actions that enhance public transit opportunities, in appropriate locations, for Bridgewater Township.
- L. Develop a mechanism for tracking progress towards the achievement of Township transportation goals.
- M. Seek solutions to the Milltown Road – Railroad geometry problem. The solution should include consideration for pedestrian and emergency vehicle use, but not for the encouragement of truck traffic.

SIDEWALKS

Bridgewater Township should promote the inclusion of sidewalks in all residential and commercial developments, including Redevelopment Projects.

COMMUNITY FACILITIES

- A. Continue to provide the level of community facilities that residents and businesses expect and need.
- B. Increase and formalize coordination with the Board of Education to support and maintain the quality of life which is expected by the residents of Bridgewater.
- C. Continue to study the expansion or replacement of the Municipal Complex, particularly the Police Station and Courtroom. The Township should consider sharing additional services with Somerville, Raritan, and other municipalities as part of an overall service delivery strategy.
- D. Track the level of need for police, fire, and emergency services to ensure that adequate facilities are provided. Sharing some municipal services with Raritan, Somerville, and other municipalities should be explored.

E. Maintain the Bridgewater Library at a level that will adequately serve Bridgewater. Providing stronger connections from the library to other Bridgewater community facilities should be considered.

RECOMMENDATIONS - GENERAL

LAND USE

- A. **Lot Area**: The Planning Board intends to emphasize that the zone regulations require a minimum lot area. While the Planning Board recognizes that there may be unique circumstances that would support the creation of undersized lots, the Board desires to emphasize that it intends to particularly scrutinize applications for subdivision in order to determine if adequate proofs to meet the requirements of the Municipal Land Use Law have been provided for the creation of undersized lots.
- B. **Single-Family Residential**:
- (1) Maintain existing residential neighborhood characteristics of development. Rezone the Raritan Valley Country Club to acknowledge the existing uses on the large tract. The appropriate zoning should recognize and validate the continued long-term use of this facility.
 - (2) Add bulk standards for maximum building coverage in residential zones.
 - (3) Evaluate regulations for home occupations and offices.
 - (4) Add community residences (described in 40:550-66.1 as permitted uses in residential zones).
- C. **Multi-Family Residential**:
- (1) Limit additional high density multi-family developments to low rise, small scale senior citizen housing. Confine such housing, if any, to the area within the Regional Center, sited in locations that provide adequate transportation options and do not adversely impact the existing quality of life in established residential neighborhoods. To that end, consider allowing small scale, low rise senior citizen development in abutting residential areas where the development will be compatible with existing neighborhoods.
 - (2) Where required to meet the Township's COAH obligation, site small-scale affordable housing opportunities.
 - (3) Where appropriate, permit group homes in locations that are in close proximity to employment centers and pedestrian systems, in the area near the Somerville Circle, adjacent to the Somerville and Raritan Regional Center borders.
 - (4) In the industrial area of Finderne, provide for low rise senior citizen housing as a displacement of underutilized industrial sites.

D. Bridgewater Regional Core/Regional Retail Business:

- (1) Promote the continued implementation of projects consistent with the Center's function as a commercial destination of regional significance and the "central place" for the Township. Study opportunities for infill development in the Core that meet the requirements of the applicable zone. Prepare a community design and access management plan that will upgrade the character of the area and foster a sense of place while improving connections.
- (2) Within the Regional Center, it is recommended that pedestrian, streetscape and traffic calming improvements be implemented, including but not limited to wider sidewalks, pedestrian-scale lights and textured crosswalks.

E. Highway Corridor: Encourage campus-style design development along major highway corridors. Provide for interconnecting access between uses for vehicular and pedestrian movement. Reduce night-glow potential for buildings, including reduction of glass area and restrictions on unnecessary all-night internal illumination.

F. Commerce Bank Park and Bridgewater Train Station:

- (1) This area should continue to support mix-use commercial, entertainment and transportation by rail. Facilitate commuter special events ridership. It is noted the Bound Brook Borough is classified as a Joint Town Center with the Borough of South Bound Brook and has been designated as a Transit Village. The development emphasis for Transit Village within the Regional Center should first be focused in the Regional Center members of Somerville and Raritan. Opportunities for regional public recreational uses should be examined for the area south of the railroad corridor. Environmental conditions should be mitigated prior to finalization of plans for use. The planning process should involve close coordination with the County.
- (2) Provide improved links and connections in the PRCPD District to reinforce the train station as a special events commuter stop. Recommended improvements include a full sidewalk network, traffic calming, bus stop(s) for future Regional Center shuttle service, intersection improvements along Main Street and Route 28, and bicycle facilities.

G. Planned Retail/Commercial and Public Development: Consider zoning that would encourage better land utilization and encourage pedestrian movement.

- H. Limited Service Commercial: Pedestrian, streetscape and traffic calming improvements should be implemented in the District, where appropriate.
- I. Medical Office Park: Consider complementary uses including hospital outpatient services and ambulatory care facilities as permitted conditional uses to accommodate Somerset Medical Center's expansion plans. Assess the feasibility of expanding limited support services into the adjacent M1-B zone to provide for greater opportunities for special needs of the medical office node.
- J. Highway Interchange Commercial: Consider eliminating personal service uses as permitted uses within this District. Increase conservation easement requirements along adjacent residential boundaries.
- K. Limited Industrial:
 - (1) Many of the historic industrial uses have been redeveloped. Narrow the range of permitted uses within the district while eliminating such industrial uses as manufacturing, chemical processing, and food processing, which have significant impacts. Where they have been permitted, study should be given to adjust the zoning to meet the use. The former Central Jersey Industrial Park zoning has been amended to permit limited retail opportunities.
 - (2) Encourage pharmaceutical niche industries on major corridor access.
- L. Quarry Industrial: Monitor the impact of the Route 22/Chimney Rock Road interchange project to determine whether it will generate additional truck traffic in Finderne. Seek County traffic input on this issue as it relates to zoning options.
- M. Environmentally-Sensitive Critical Areas:
 - (1) Re-evaluate its steep slopes ordinance and other environmental regulations to coordinate base density with the critical nature of the land (increase minimum lot size). Consider a critical areas ordinance to further regulate development in environmentally-sensitive areas, including the environmentally-sensitive ridge lines.
 - (2) The Township should add the statewide Residential Site Improvement Standards in its ordinances and Stormwater Management regulations in its ordinances.
- N. Aesthetics:
 - (1) The Township should identify and improve major gateway locations to enhance the image of the community.

(2) Zoning amendment recommendations should be made to address recurring zoning issues and changing municipal policies.

- O. Historic: Integrate the historic Van Horne House into the PRCPD District through improved signage, access/parking, streetscape improvements on Main Street and the introduction of compatible uses. Work with the Heritage Trail Association to promote uses such as exhibits, historical programs and displays on the Battle of Bound Brook that will increase its use and visibility.

PARKS, RECREATION, AND OPEN SPACE

Preserve and enhance existing parks, recreation, and open space by requiring development to create connections/linkages, maximizing use. Dog parks are reviewed as an amenity; however, they should not be sited in areas that will impact residential neighborhoods. Encourage proper maintenance of conservation areas.

LAND USE PLAN

EXISTING CONDITIONS

Regional Center

The Township is affected by the spin off effects of development in Somerville and Raritan. Participation in the Regional Center process is seen as a means of addressing development pressure, encouraging smart growth, and preserving residential quality of life. Where possible, there is a focus to maximize the opportunity for safe traffic interconnections and solving other common concerns experienced by the Regional Center partners.

Land Use Trends

As previously noted, Bridgewater has an increasingly limited supply of vacant land that is available for future development. Vacant land accounts for 1,092 acres throughout the Township. There may be some in-fill development opportunities on some of the remaining vacant properties listed in Table 1. It is projected that this type of growth will be a mix of residential and commercial development, depending upon the location and the zoning for the property. It is necessary to set policy for possible future requests of 'tear-down' and two-family unit conversions. These issues are addressed in the body of this Master Plan.

Table 1 *LAND USE ANALYSIS Township of Bridgewater, N.J.			
<i>Land Use</i>	<i>Total Parcels 1996</i>	<i>Total Parcels 2002</i>	<i>Change</i>
Residential	12,748	14,647	+1,899
Residential Apartments	61	13	-48
Commercial	302	377	+75
Industrial	54	48	-6
Farm	72	53	-19
Vacant Parcels	1,238	592	-646
Tax Exempt	N/A	657	N/A
Total Parcels	14,475	16,387	+1,912
*Parcels are line item lots on the Tax Assessor's Listing. Source: Township of Bridgewater; Tax Assessor, 2004			

PLANS, PROJECTS AND INITIATIVES

The Township of Bridgewater has initiated and/or is a partner in multiple planning, revitalization and infrastructure projects that will improve local quality of life, generate new economic development and revitalize under-utilized properties and areas. These projects include the following:

- A. Somerset County Regional Center Master Plan: An innovative and unique regional planning process involving Bridgewater Township, Somerville Borough, Raritan Borough, Somerset County and the Regional Center Partnership. This Regional Center was the first approved in the State of New Jersey.
- B. Route 22 Suburban Boulevard Study: A study and plan to improve Route 22 by separating local and regional traffic, upgrading highway crossings, providing green infrastructure and enhancing mobility in the Regional Center. This project is yet to be federally funded.
- C. Route 22/Chimney Rock Road Interchange: A capital improvement project to upgrade the Route 22 and Chimney Rock Road interchange and increase access, capacity and safety in the interchange area. This project is currently funded.
- D. Raritan River Greenway: A Somerset County initiative to create a linear greenway along the Raritan River in Bridgewater, Somerville and Raritan for passive and active recreation as well as conservation.
- E. East Gateway Development: The final development of the Chimney Rock Road corridor in the easternmost section of the Township within the Regional Center to its intersection with Route 28 which should be based upon smart growth principles.
- F. Bridgewater Core Build-Out: The final build-out of the Bridgewater Commons, the municipal complex development and creation of improved connections linking the commercial, public and residential uses in the area, consistent with the Bridgewater RCMP.
- G. West Gateway Development: Enhance the gateway with a focus toward amenity improvements
- H. Washington Valley Open Space System: The Township-led effort to preserve open space and increase recreational opportunities in the Washington Valley corridor through the Martinsville section including the Middlebrook Trail.

OPPORTUNITIES

The Township of Bridgewater has a well-established land use pattern, fixed infrastructure, diverse residential neighborhoods, multiple business districts and extensive park and open space areas. The Township has reached a critical moment in its development because land use decisions that are made now will shape the future build-out of the community and determine its physical character.

The key organizing principle established in this plan is that neighborhood planning and preservation is a priority. This approach raises the following opportunities and challenges to be addressed by the Township through the Master Plan Updates and future planning efforts:

- A. Update the land use plan to address areas where land uses are in transition and reinforce established residential neighborhoods, commercial districts and park/open space areas.
- B. Recommend amendments to the zoning ordinance and map that will implement the land use plan including permitted uses, bulk regulations and site plan/subdivision standards.
- C. Promote the development of underutilized industrial and commercial areas that complement the variety of uses within the Township.
- D. Coordinate land use and transportation planning to provide a comprehensive approach to development.
- E. Evaluate a range of available planning, zoning and implementation tools available to the Township including but not limited to Design Standards, special improvement districts and public-private partnerships with the goal of enhancing the quality of life for the residents of Bridgewater.
- F. Expand regional coordination and cooperation through the Somerset County Regional Center Strategic Plan process.

GATEWAYS

Gateways are principal entrances into a municipality, neighborhood, business district or other section of a municipality. They typically occupy a high visibility location and function as the “front door” to a community. Gateways have the potential to contribute to a unique community identity and convey an image as an attractive place to live, work, visit and invest. There are numerous areas in the Township of Bridgewater that function as gateways into the community. They include the East Gateway at Route 22, Route 28/Union Avenue and Main Street, the West Gateway at Route 202, the

Bridgewater Core, the NJ Transit Bridgewater Train Station and other major entry points including Old York Road, Washington Valley Road and Route 202-206. It is recommended that the Township identify and visually improve major gateway locations to enhance the image of the community and strengthen its identity. Possible improvements include new signage, landscaping, streetscape improvements and public art.

BROWNFIELDS

Brownfield sites should receive increased focus for clean-up and re-use. A listing is provided.

VOGT DRIVE/SOMERVILLE ROAD PROPERTIES

The Township should work with the County to achieve favorable buffers for the lands fronting on Vogt Drive and Somerville Road against lands that are developed in a residential pattern, and to ensure that any new development permitted in that area is of low intensity and protects and maintains the quality of life of existing residential neighborhoods. The Township should also work with the County to establish a greenway belt through this area, conserving the area between Commons Way to the Bridgewater-Raritan Middle School. This would also include those Township owned properties along Prince Rodgers Avenue and Somerville Road. The Township should consider the acquisition and consolidation of privately owned lots in the area of the Bridgewater Township Senior Citizen's Center. Most of the privately owned lots in question are not able to be developed as they are substantially undersized. With the many Township owned lots in that area, this assembly is feasible. Possible uses for land in this area might include a Children's museum, expansion of the Richard Hall Mental Health Center, and active and passive recreation. Otherwise, it should be preserved as open space.

ENVIRONMENTALLY-SENSITIVE CRITICAL AREAS

Bridgewater contains environmentally sensitive natural features that require protection from encroaching development and additional disturbance. These sensitive features include the Raritan River, North Branch of the Raritan River, Middle Brook, Peter's Brook, Washington Valley and Watching Mountain ridgelines. They contain water bodies, floodways, 100-year flood hazard zones, wetlands and steep slopes that are susceptible to development impacts.

Development in these sensitive areas results in site disturbance, excessive stormwater run-off and increased soil erosion and the loss of the natural characteristics of the environment that is so valuable to the image of Bridgewater Township. The Township's surface water bodies are susceptible to flooding with the potential for property damage in adjacent developed areas during periods of severe inclement weather. There should be renewed commitment to the Township's steep slopes ordinance and other environmental regulations to ensure that natural systems and environmentally sensitive areas are adequately protected against unnecessary disturbance.

STATE RESIDENTIAL SITE IMPROVEMENT STANDARDS AND STORMWATER REGULATIONS

New residential development in the Township of Bridgewater is governed by the State Residential Site Improvement Standards (RSIS). The RSIS were adopted by New Jersey in January, 1997 and govern any site improvements carried out in connection with a residential development application. According to the State, the standards are intended to create uniform residential site improvement guidelines and ensure predictability in the development process. The rules supersede municipal standards for residential development including parking and took effect on June 3, 1997. It is recommended that the Township zoning ordinance be amended where necessary to ensure that site plan, subdivision and design regulations are consistent with the RSIS and the new State Stormwater Regulations.

ZONING

MT. LAUREL COMPLIANCE

According to the COAH Substantive Certification dated June 7, 1995, Bridgewater Township had entered into a court order in September 1985 to provide 1,468 units of low and moderate-income housing. The majority of these units were to be created by allowing developers to construct multi-family developments at a density of between 6 and 10.5 units per acre in exchange for a 20 percent set aside of affordable units. On June 7, 1995 COAH adopted a resolution granting the Township substantive certification. The number of affordable units required by COAH was substantially less than the 1985 court order. As a result, the Township was assigned a COAH obligation of 797 units. Through time and application of credits and other adjustments, COAH reduced the obligation to zero. Further, COAH confirmed that Bridgewater has an excess number of units that may be applied to future obligations. According to COAH, Bridgewater has 333 units in excess of its obligation (identified on December 1, 2003 – Remaining Prior Round Obligation).

Bridgewater Township has revisited the Township's Spending Plan which defines programs and projects that utilize the developer fees collected. The Township continues to collect developer fees for affordable housing. Since Bridgewater Township has more than met its requirements for low and moderate income units, zoning modifications are warranted to reduce the area reserved for affordable housing densities. Land use strategies should be advanced to eliminate zoning that does not encourage one hundred percent set aside for low and moderate housing.

The Township of Bridgewater's large area, distinct neighborhood character and development pattern are reflected in the presence of multiple land use and zoning districts. Bridgewater has a variety of residential, commercial, industrial, and mixed-use districts and a total of 42 zoning districts. It is recommended that a study be undertaken to collapse the number of land use districts, where appropriate.

RESIDENTIAL LAND USE DISTRICTS

The Township of Bridgewater has a diverse housing stock including detached single-family houses, attached townhouses, multi-family apartments and specialized housing such as senior citizen

apartments. Zoning districts include the Single-Family Residential, Multi-Family Residential and Planned Unit Residential Districts which are comprised of multiple sub-districts. The primary purpose of the Districts is to accommodate existing residential development and provide the opportunity for limited in-fill development of housing on suitable underutilized parcels.

The status of larger undeveloped parcels that are residentially zoned should be examined and modified, where appropriate, in establishing a balanced land use pattern. The major objectives for the residential land use districts should be preserving the residential character of existing neighborhoods, strengthening transitional residential districts, preventing the intrusion of commercial uses, promoting property maintenance, eliminating the illegal conversion of single-family houses to multi-family dwellings and ensuring that residential neighborhood needs are matched to Township infrastructure, public and private community facilities, and services.

Community Residences

General recommendations for all residential districts to include the following:

Maintain the existing permitted uses and add community residences for the developmentally disabled as required by the Municipal Land Use Law at N.J.S.A. 40:55D-66.1.

Low Density Single-Family Residential

The purpose of the Low Density Residential District/Single-Family is to accommodate detached single-family housing on relatively large lots at a low density of development. The District contributes to the Township of Bridgewater's semi-rural and suburban character and contains several stable residential neighborhoods. This district corresponds to the R-40 and R-50 zones and includes the Foothill Road neighborhood as well as Martinsville and the Country Club Road neighborhood.

The District permits detached single-family houses, country clubs, agriculture and public facilities. The permitted residential density ranges from 1.09 units per acre in the R-40 zone to .87 units per acre in the R-50 zone with a minimum lot size of 40,000 square feet and 50,000 square feet respectively. The maximum lot coverage is limited to 15 percent; however, maximum building

coverage is not regulated. The major challenge is the preservation of existing neighborhoods with particular attention to maintaining the residential character, quality of life and compatibility of in-fill development. Intimately linked to this challenge is the need for appropriate traffic linkages which serves these areas without the impact of leading development or encouraging intensified development projects.

Toward this end, the following modifications to the zoning ordinance are recommended:

- A. Retain the existing permitted uses and add community residences for the developmentally disabled as required by the Municipal Land Use Law at N.J.S.A. 40:55D-66.1.
- B. Modify some of the existing bulk standards and develop a maximum building coverage standard to address intensity and scale of development. These recommendations are made elsewhere in this report.
- C. Study the creation of controls for those properties on steep slopes, including lands north of Washington Valley Road, with the objective of requiring any new development to be placed in lesser slope areas. This area is impacted by steep slope conditions with many areas having slopes well in excess of 30 percent. There is no regulation which requires that structures be placed on the lesser slopes. A change in the existing Ordinance would assist in preserving the environmentally-sensitive areas, including along the Second Watchung Ridge, and protect the downstream properties from storm water runoff and soil erosion. New regulations should be added to the ordinance to reflect this new approach toward preservation. Recommendations are provided in the body of this Plan.
- D. Delete Section 126-305.A(5) from the Ordinance. This provision has been used to permit accessory dwellings on a single-family residence lot.

Medium-Density Residential (R-20, R-10, R-10.1 and R-10A)

The Medium Density Single-Family Residential District is intended to accommodate detached single-family housing on mid-size lots at a medium density of development. The District is largely stable and is concentrated in the southern section of the Township of Bridgewater South of Route 22 and incorporates many of the Township's older and well-established neighborhoods. It has a suburban character and corresponds to the R-20, R-10, R-10.1 and R-10A zones located in

Finderne, Bradley Gardens, Thomae Park and a section of Martinsville adjacent to I-78. It also includes the R-20.1 zone in the Milltown/Vanderveer Road area. The District permits detached single-family houses, detached two-family houses, shared housing, patio homes, country clubs, and agriculture and public facilities.

The permitted residential density ranges from 2.2 units per acre in the R-20 zone to 4.3 units per acre in the R-10 zone and 7.3 units per acre in the R-10A/B and R-20.1 zones. The minimum lot size ranges from 20,000 square feet in the R-20 zone to 6,000 square feet in the R-10A/B and R-20.1 zones. The maximum lot coverage is limited to 25 percent in the R-20 zone and 35 percent in the R-10A/B and R-20.1 zones. The primary issues involve preserving the neighborhood and maintaining the overall suburban character, residential quality of life and the compatibility in light of future in-fill development. To address these issues, the following detailed modifications to the Land Use Ordinance are offered:

- A. Amend Section 126-308.2.A (3d) (R10B Single Family Residential Zone) regulation to read:

"Patio-line houses, freestanding single family dwellings on their own lot, with one side yard setback a minimum of three feet from the side lot line. The side of the structure facing the minimum three foot side yard setback shall be without windows and form a solid wall for the adjacent residential yard."
- B. Amend Section 126-308.3.1 (R-10.1 Single Family Residential Zone) to read:

"The principal permitted use, permitted accessory uses and conditional uses in this zone are the same as those in the R-10 Single Family Residential Zone. Further, the design bulk standards shall also be that of the R-10 zone as indicated in the Schedule of Area, Yard and Building Requirements, with the following exceptions:"
- C. Amend Section 126-308.2 (R-10B Single Family Residential Zone), subsection 126-308.2.A(4) (Supplementary Requirements) to add:

"Tract Size: 1.75 Acres"
- D. Amend Section 126-308.4 (R-20.1 Single-Family Affordable Residential Zone) subsection 126-308.4.C to read:

"Conditional uses for minimum tract size of 3 acres:"
- E. Amend Section 126-308.4 (R-20.1 Single-Family Affordable Residential Zone) to delete subsection 126-308.4.C(5) (Conversion). This eliminates conversion of single family units into two family dwellings.

- F. Amend Section 126-308.4 (R-20.1 Single Family Affordable Residential Zone) to delete subsection 126-308.4.E.
- G. Section 126-307 (R-20 Single-Family Residential Zone) should be deleted in its entirety.
- H. Amend Section 126-308 (R-10 Single-Family Residential Zone) to read, "The principal permitted uses, permitted accessory uses and conditional uses in this zone are the same as those in the R-50 Single Family Residential Zone". The reason for this amendment is to eliminate the permitted conversion of single family dwelling to two-family dwellings.
- I. Amend Section 126-375 to increase minimum rear yard requirements for the R-10 and R-10A zones from 20' to 25'.
- J. Amend the Zoning Ordinance to include maximum building area standards.
In order to address the influences of increased traffic, including industrial traffic using Thompson Avenue, it is recommended that several lots on the easterly side of Thompson Avenue be rezoned from R-20 to C-3A.

The lots recommended to be rezoned to C-3A are:

Block 801 Lots 50, 49 and a portion of lot 48

Pearl/Kline/Morton Streets:

This area of Finderne is currently zoned R-10 and includes a number of oversized lots that could be assembled, dramatically increasing the number of residential lots. Most of the lots, particularly along Pearl Street, are very deep with some lots being in excess of 950 feet deep. A study of the lots in this area indicates that an area of 65 existing lots should be rezoned from the current R-10 zone to the R-20 zone. Of the 65 lots, only 5 lots would become nonconforming for both lot area and lot width with this change. Additionally, another 20 lots presently lack the required lot width of 100 feet and 120 feet for a corner lot that would be required with either the R-10 or the R-20 zone with all but 6 of the 20 becoming nonconforming due to a lack of the required minimum lot area required for the R-20 zone.

Lots included in this recommendation to redesignate the following to R-20 zone:

Block 254, Lots 60 through 74

Block 255, Lots 16 through 33, Lot 36, Lots 41 through 47

Block 256, Lots 1 through 8 and 35 through 41

Portions of the R-10 zone along Frog Hollow Road and Hollender Street and Union Avenue should remain unchanged as those lots conform to the R-10 standards.

R-10.1 Single Family Zone

Delete Section 126-308.3.1A (R10.C Professional Office/Residential Zone). This provision prohibits access to Sunnyside Terrace. A recent subdivision has granted access to this roadway. All other provisions of this Ordinance shall remain unchanged.

Golf Course Enterprise Zone (GCE)

Modify section 126-301 (Zoning Districts) to add the Golf Course Enterprise Zone (GCE).

Rezone the Raritan Valley Country Club, under current R-20 zoning, to a Golf Course Enterprise (GCE) zone. The new zone will set the existing uses as permitted uses within the zone.

The Raritan Valley Country Club, a privately owned facility, is an amenity that should be grounded in the Ordinance as a permitted use. It is valued as an asset to the community and as such it is recommended that it be placed in a new Golf Course Enterprise Zone (GCE) with the following zone standards:

Permitted Principal Uses:

Recreational uses including: Private golf courses, tennis courts, swimming pools.

Accessory uses: Uses and structures customarily incidental to the principal use including equipment and apparel shops, restaurants, and private parties of the membership.

Minimum Lot Size	150 Acres
Minimum Front Yard	100'
Minimum Side Yard	75'
Total of Two Side Yards	200'
Minimum Rear Yard	75'
Maximum Percent Improved Lot Coverage	20%
Minimum Lot Width	350'
Maximum Height	2 Stories/35'
Maximum Floor Area Ratio (F.A.R.)	.20

Accessory Structures:

Minimum Side Yard	50'
Minimum Rear Yard	50'

Lots included in the recommendation to designate as GCE are:

Block 400, Lot 8

Block 401, Lots 1 and 4

R-20.1 Zone

The Township's 1990 Master Plan identified the need to create higher density in the Milltown/Vanderveer Road in response to the Township's Mt. Laurel obligations. In 1991 the R-20.1 zone was adopted to encourage affordable single-family dwellings in response to the number of high density multi-family developments planned for this area of the Township as part of Bridgewater's Mt. Laurel settlement. The R-20.1 zone was successful in creating single-family homes on small lots that were not available in the Township at that time. The Township has since received certification, making development pursuant to R-20.1 standards no longer warranted.

It is the Township's recommendation that those existing lots along Ventura Drive and those pockets along Vanderveer Road that existed prior to the zone change be rezoned to the R-20 zone. All but one of the lots in question would comply with the R-20 standards proposed.

Lots involved in this recommendation to re-designate the following to R-20 zone are:

Block 186, Lots 51-55

Block 192, Lots 55-59

Block 195, Lots 56-61

Block 197, Lots 1-7

Block 198, Lots 2-9

On the southerly side of Route 28 and also along Buena Parkway are several contiguous parcels which should be re-designated due to the size and geometry of the land. It is recommended that these parcels, which are currently within the R-20.1 residential district, be re-designated to be within the R-20 residential district. The vast majority of these lots currently conform to the R-20 zone in terms of minimum lot area and minimum lot width.

Lots which should be designated as R-20 zone are as follows:

- Block 172 Lots 4 (merged; formerly lots 2, 3 and 4), 5-9, 11, 12
- Block 184 Lots 17-20

High Density Multi-Family Residential

The purpose of the High Density Multi-Family Residential District is to accommodate a broad range of attached multi-family housing on larger lots at a higher intensity of development. The District contributes to the Township of Bridgewater's diverse housing stock. This includes housing opportunities for singles, senior citizens who wish to age in place, young couples, families saving for a detached house, empty nest adults downsizing to smaller residences, and low and moderate income households. This district is concentrated in the southern section of the Township within the Regional Center in Finderne, the Milltown/Vanderveer Road neighborhood, and within the Bridgewater Core where access, infrastructure and established land use patterns support multi-family residential development.

The District corresponds to multiple zoning districts including the R-MDU-5, R-MDU-6, R-MDU-8, R-MDU-10.5, SC/HD and SC/MD zones. It accommodates multi-family dwellings, townhouses, single-family houses, two-family houses and senior citizen housing. The permitted residential density ranges from 5 units per acre in the R-MDU-5 zone to 35 units per acre in the SC/HD zone with a minimum lot size of 4 acres in the SC/HD zone and 12 acres in the R-MDU zones. The maximum building height ranges from 2.5 stories/35 feet in the SC/MD zone to 38-feet in the R-MDU zones and 7 stories/80 feet in the SC/HD zone. The primary issue identified by the Township with respect to the High Density Multi-Family Residential District is the location, scale and character of development. Toward this end, the following are recommended:

- A. Modify the Township policy from the 1996 Master Plan Re-examination Report to read: "Limit the extent of further development of high density multi-family housing developments to locations specifically recognized within the zoning ordinance."
- B. Revise the building height limits in the District to ensure that future multi-family residential development maintains a low to mid-rise scale of 3 stories/45 feet.

Commercial/Residential Mixed Use (R-40A, R-40B and R-40C)

The Route 202-206 corridor extends from the Somerville Circle north to the Bedminster border. This is a corridor that has been the focus of much discussion and study over the past twenty years. The challenge has always been to protect the residential properties that front on the

highway and to preserve the residential neighborhoods just off the highway. Corridor studies conducted in the late 1980's resulted in the creation of new zoning districts following the adoption of the 1990 Master Plan. These changes allowed for a mix of uses and encouraged the assembly of properties for low intensity commercial projects. These include a funeral home, a bank, a childcare center and an active adult community on 7.3 acres.

The R-40A zone was one of the new zones created and includes those lots fronting on the eastside of the highway south of Foothill Road. The R-40A zone permits a maximum building coverage of 7 percent and there is no recommended change within this section of the zoning district. Within this zone, a chiropractor's office was opened as part of the conversion and expansion of a former single-family residence. Additionally, an 8,000 square foot medical/professional office was constructed on properties where two former dwellings were razed.

The R-40B zone was created for those properties on the west side of the highway including residential lots on Talamini Road, Tobia Road and Petron Place. The zone requires that all of the lots in this area be assembled to create a conforming lot. As this is clearly not a feasible zone requirement, the recommendation is that the R-40B zone be eliminated and all of the properties be rezoned to the R-40A zone (the zone that existed prior to the creation of the R-40B zone), except for Block 476 Lot 20 which is a 5 acre site containing an office building. This tract should be placed in the GCM zone district.

Lots involved in this recommendation are:

Block 476, Lots 1 through 6 – Rezone to R-40A zone

Block 476, Lot 20 – Rezone to GCM zone

The R-40C zone includes six properties that front on Route 202-206 located north of Old Farm Road and south of the AT&T complex. The present zoning allows single family dwellings and office developments with a limited maximum building coverage of 7 percent. It is recommended to amend the existing zoning from R-40C to R-40A.

Lots involved in this recommendation are:

Block 485, Lots 5 through 7

Block 484, Lots 1 through 3

Other Recommended Ordinance Amendments

A. In order to deal effectively with the intensity of residential development, it is recommended that maximum building coverage be placed on all residential developments. The recommended controls for maximum building coverage should be added to the ordinance schedule of Area, Yard, and Building Requirements chart as Section 126-376 (Schedule of Area, Yard, and Building Requirements):

Zone	Maximum Percent Building Coverage for Residences	Maximum F.A.R.
R-10	20%	.25
R-10A	20%	.25
R-10B	20%	.25
R-10C	20%	.25
R-10.1	20%	.25
R-20	13%	.13
R-40	12%	.12
R-40A	12%	.12
R-50	12%	.12

B. Section 126-321.3 (C) (2) (R-MDU Zone)

Amend the percent maximum improved lot coverage and maximum F.A.R. for multi-family, townhouses, single family patio and single family detached homes as follows:

Type	Improved Lot Coverage	Maximum F.A.R.
Single Family Detached	20%	.25
Single Family Patio	20%	.25
Townhouses	60%	1.20
Multifamily	20%	.40

C. Delete provision in Section 126-339.F (Requirements for Specific Accessory Uses) to eliminate the conditions for development of Accessory Dwelling Units. This deletion is viewed as necessary in order to overcome the concern of unnecessarily increasing density.

D. The unit may not be occupied by another party without re-registering with the Department of Welfare.

E. Delete Section 126-321.3 and 126-321.3a. This provision permits conversion of one family units to two-family units in the R-MDU zones of MDU-10.5, MFDU-8, MDFU-6 and MDU-5.

F. Amend Section 126-309 (R-40 MDU-1) to read, "The principal permitted uses, permitted accessory uses and conditional uses in this zone are the same as those in the R-50 Single

Family Residential Zone." The reason for this amendment is to eliminate the permitted conversion of single family dwelling to two-family dwellings.

- G. Delete Section 126-347A.3. (R-40MDU zone). This provision permits two to four dwelling units.
- H. Add a new section to the Ordinance which requires that principal buildings "shall be set back 200' from Route 22 and from Route 202. Parking shall be set back 100' from Route 22 and Route 202."
- I. Amend the Ordinance to require setbacks of commercial or multifamily residential uses other than two-family dwellings for outdoor recreational equipment and areas such as jungle gyms, teeter-totters, sand boxes, and play fields from residential property lines. The required distances are as follows:

Lot up to 2 acres	25'
Lot of 2.1 acres to 5 acres	50'
Lot over 5 acres	100'
- J. Amend Ordinance to require that all developments shall install sidewalks. The Board, in its sole discretion, may permit the applicant to contribute the cost of the sidewalks to a designated sidewalk fund.

- K. Revise section 126-305 (zoning districts) as follows:

Delete: R-40B and R-40C

Add: BRC, Bridgewater Regional Center pursuant to 126-320.2

PRCPD Planned Retail Commercial and Public Development

GCE, Golf Course Enterprise

SC, Senior Citizen Residential

LC, Limited Commercial

COMMERCIAL LAND USE DISTRICTS

The Township of Bridgewater has multiple commercial districts and a dispersed pattern of business centers that provide local neighborhood and regional shopping, employment, services and entertainment. The commercial districts include a regional shopping center, big box retail power centers, neighborhood commercial districts and highway-oriented commercial centers. The majority of Bridgewater's commercial development is focused in the southern section of the Township within the Regional Center and includes the Bridgewater Commons Mall, the Bridgewater Promenade, Route 22 corridor businesses, the business districts in Finderne, and Route 202.

Commercial land use districts correspond to existing zoning districts such as the Regional Retail Business, Office/Service, Neighborhood Business, Planned Retail/Commercial/ Public, Special Economic Development and Village Center Districts. They serve multiple purposes such as accommodating existing commercial development of various types, providing a balance of retail, service and employment generating development, and promoting appropriate development of vacant or underutilized parcels.

This reflects the Township's pattern of development which ranges from a community of rural neighborhoods still anchored by small commercial districts to a transportation crossroads with newer commercial corridors that function as major regional destinations for shopping, services and employment.

Bridgewater is experiencing a slowing of commercial development. Past trends include approximately 21 percent increase in properties used for commercial purposes and approximately 40 percent decrease in vacant land consumed by commercial development between 1996 and the end of 2003.

Potential development sites include parts of the East Gateway such as the former Central Jersey Industrial Park, the Fischer Scientific sites on Route 202 and the area of Chimney Rock Road. There are also opportunities for limited development on a smaller scale within the existing stable neighborhood business districts of Finderne, Bradley Gardens and Martinsville. The major issues

affecting the commercial land use districts are addressing the economic viability of transitional areas, maintaining a balance of neighborhood, service and office uses. Encouraging continued private sector investment, public infrastructure improvements, and supporting the neighborhood business districts that primarily serve local residents are other factors that require focused attention.

Bridgewater Regional Center Core/ Retail

The Bridgewater Regional Center/Regional Retail Business District is the commercial center of the Township of Bridgewater and is intended to function as a local and regional destination for shopping, services and employment. The District encompasses the Bridgewater Commons Mall as well as the recently-constructed Marriott Hotel and Bridgewater Crossing office complex. It corresponds to the C-2 and BRC zones with the BRC zone serving as the overlay zone for the area. The District permits retail, service and entertainment uses as part of a planned redevelopment consisting of a regional shopping center, office buildings, full-service hotel, suite hotel and accessory parking, open space and common areas. The District is approaching full build-out as the redevelopment plan is in the final stages of implementation.

The development within the District is intensive in scale and character with a permitted lot coverage of 70 percent and a maximum building height of 9 stories/110 feet. There are changes recommended for the Bridgewater Regional Retail Business District given its advanced implementation and the Bridgewater desire to change its course and adopt a low rise suburban image rather than allowing future development to take on a mid-rise or high rise appearance. Other major issues are improving links and connections among the various land use components and enhancing the sense of place within the District. The following is a summary of the recommendations:

- A. Amend the Ordinance to adjust downward the maximum heights of buildings within the BRC district to 3 stories/45 feet.
- B. Prepare an updated community design and access management plan that will upgrade the character of development and foster a sense of place while improving links to, and connections within, the District through balanced access. Such access would include a pedestrian-friendly streetscape, expanded walking/bicycling infrastructure, mass transit

access from a Regional Center shuttle and improved connections to neighborhoods within the Township and Regional Center.

- C. Develop recommendations for County-owned properties along Vogt Drive that would meet the needs for governmental services and also respect the need for an adequate buffer from adjacent residential properties.

Neighborhood Business

The purpose of the Neighborhood Business District is to provide a variety of small-scale commercial uses at a modest intensity of development that would support the established residential neighborhoods. The District corresponds to the C-1 and C-1A zones and is found on Main Street in Finderne, Old York Road in Bradley Gardens, Washington Valley Road in Martinsville, Prince Rogers Avenue in the Bridgewater Core, Milltown Road at Route 202, and the Somerville Circle vicinity. It is predominantly commercial in character but has developed over time with a mix of uses. The District is located within or in close proximity to the Township's residential neighborhoods. Typical uses include retail stores, personal service establishments, professional offices, sit-down restaurants and banks. The health of the District is central to the residential quality of life because it is a neighborhood anchor that often serves as the destination of choice for daily activities such as dining out, shopping, banking and other daily needs.

Toward this end, it is recommended that the Township continue its policy to "Upgrade... existing commercial centers located on Old York Road in Bradley Gardens, Main Street/Union Avenue in Finderne and Washington Valley Road in Martinsville" as stated in the 1996 Master Plan Re-examination Report. The major issues in the District include maintaining its economic viability in the face of competition from larger-scale retail development, promoting a broader range of commercial uses to meet the daily needs of Township residents, providing opportunities for appropriate in-fill development in accordance with zoning, enhancing the visual character and quality of development, protecting adjacent residential neighborhoods from nuisance impacts and considering additional residential development to support businesses in the creation of a village style mixed-use environment. The major recommendations are as follows:

- A. Maintain the boundaries of the Neighborhood Business District.

- B. Establish new standards for side yard setbacks in the C-1 zone. Modify the Schedule of Area, Yard and Building Requirements after Section 126-376 (Schedule of Area, Yard, and Building Requirements) to require a minimum side yard setback of 15 feet for each side yard. Total for 2 side yards shall be 40 feet. (No side yard is now required.)
- C. Modify Section 126-332 (Minimum Buffer/Conservation Easement Distance Requirements) of the zoning code that addresses required buffers/conservation easements designed to protect existing residential uses from commercial development. The required buffer for the C-1 zone abutting any residential zone should be increased from 25 feet to 50 feet.
- D. Delete Section 126-311.C.5. (Neighborhood Business). This provision permits conversions of a one family residence into a two-family residence.

Office/Service

The Office/Service District (C-3 and C-3A) is intended for intermediate-scale commercial office uses on larger parcels with direct highway access. There should be no access on to local roadways except for emergency services. The District corresponds to the C-3 and C-3A zones and is concentrated in the Route 22 corridor within the Regional Center with the exception of several outparcels located on Route 28, Milltown Road and Route 22 at the municipal border with the Township of Green Brook. It permits a broad range of offices for business, professional and service uses as well as research, medical services, banks and financial institutions and assisted living facilities. The primary difference between the C-3 and C-3A zones is that banks and financial institutions are not permitted in the C-3A zone. Retail activity is conditionally permitted as an accessory use only provided it is part of a larger, principal office use. The bulk standards encourage low-rise campus style development with a minimum lot area of 5 acres, lot coverage of 60 percent, F.A.R. of .30 and building height of 3 stories/45 feet.

The Planning Board specifically expresses a preference for new office development rather than additional retail activity along the major highway corridors, including those within the District.

There is also support for continued low intensity campus style development with generous setbacks from highway frontage in the Route 22 corridor similar to the Ethicon and Metropolitan

Life sites on Route 22 west of the Somerville Circle. From a planning perspective, low-rise campus style office development remains appropriate given the existing land use pattern, highway access and the low visual impact character of the District. It has been argued that front yard accommodations along the highway would be an important contribution to mass transit service such as a Regional Center shuttle. To address this and other issues, the following recommendations are made:

- A. Maintain the existing Schedule of Area, Yard and Bulk Standards that all buildings along Route 22 be setback at least 200 feet and that all parking be setback at least 100 feet. Although the Planning Board has granted variances to deviate from the required setbacks, citing the lack of depth for many of the lots fronting on Route 22, it is recommended that the current minimum building setback be maintained whenever feasible. When specific locations are established, the property should not be penalized for land dedication for a shuttle stop.
- B. Shuttle stop areas should be required in the C-3 zone, where appropriate.
- C. Add new subsection 313.1(E.17), C3-A Limited Office Zone to read: Lots existing at the time of adoption of this ordinance shall not be required to seek an area variance if the lot is less than 30,000 square feet and when the existing structure is not removed, but is converted to the new permitted use.

Amend subsection 313.1 (E.1) to read: Minimum lot area: 30,000 square feet.
- D. Require new development in the Regional Center to accommodate areas for mass transit service, where appropriate, into site plan design. Access management strategies should be developed in anticipation of a Regional Center shuttle system and future mass transit, pedestrian and bicycling improvements.
- E. Amend zoning to confirm that only nursing homes and assisted living facilities are permitted in the C-3 zone as a health service.
- F. Amend Section 126-375 (Schedule of Area, Yard and Building Requirements) for the C-3 zone as follows:

Maximum Building Height	2 ½ story/35'
Maximum Improved Lot Coverage	.50

Planned Retail/Commercial and Public Development (PRCPD)

The purpose of the Planned Retail/Commercial and Public Development (PRCPD) District is to accommodate the planned redevelopment of former American Cyanamid (currently Wyeth) land in the East Gateway with a mix of commercial and public uses. The redevelopment project has been implemented and the PRCPD District has emerged as a major local and regional destination containing the Bridgewater Promenade big box retail center, the Hilton Garden Inn, the Commerce Bank Ballpark and the NJ Transit Bridgewater Train Station. The District corresponds to the PRCPD zone extending from Route 28/Union Avenue in the north and the NJ Transit Raritan Valley Line in the south. It permits retail stores, offices, hotels, restaurants, sports arenas/stadiums and public facilities such as train stations.

Under the current zoning, the build-out of the District is capped at a maximum of 700,000 square feet of commercial space with a maximum F.A.R. of .15, lot coverage of 60 percent and building height of 35 feet. This results in a dispersed pattern of development characterized by free-standing big box stores in large parking lots with a strong auto orientation and limited pedestrian/bicycle accessibility. Changes recommended for the PRCPD District are as follows:

- A. Eliminate the maximum square footage requirement of the project found in Section 126-321.F.2 (PCRD) and retain the maximum F.A.R. at 15%. This is necessary to eliminate an inconsistency that exists in the ordinance, since the .15 F.A.R. does not result in 700,000 SF of building.
- B. In the future, the existing zoning adjacent to the PRCPD zone along Main Street should be examined to allow more compatible uses.
- C. Amend Section 126-321.A.1 regarding permitted uses. The ordinance should add an exception to "retail goods and services" to note "...services, excluding stations that dispense gasoline, diesel fuel, or propane."

Limited Office/Martinsville

The Limited Office/Martinsville District (C-3B) is intended to recognize the need for a transitional zone between the Martinsville neighborhood business district at Washington Valley Road/ Chimney Rock Road and the multi-family residential development at Loft Farm. The District corresponds to the C-3B zone and permits professional office uses including medical offices and detached single-family houses. The bulk standards provide for limited development intensity with a minimum lot area of 2

acres, maximum F.A.R. of .15, lot coverage of 50 percent and building height of 2 stories. There are no changes recommended for the District.

Office/Lodging

The purpose of the Office/Lodging District (C-4) is to provide the opportunity for coordinated development of highway-oriented business uses on large lots at a moderate intensity of development. The District corresponds to the C-4 zone and is limited to a relatively small area on the south side of Route 28 north of Vanderveer Road. It permits offices, services, restaurants and extended-stay lodging on lots with a minimum lot area of 5 acres, F.A.R. of .15, lot coverage of 50 percent and building height of 2.5 stories/35 feet. It should be noted in the ordinance that the C-4 zone permits development as set forth in Section 126-347.2 (Mixed Use Development Projects). There are no other modifications proposed for this zone.

Commercial/Nursing Home

The Commercial/Nursing Home District (C-5) is intended to provide the opportunity for limited development of senior citizen housing and offices in a highway location. The District is limited to a relatively small area on the north side of Route 22 that backs up to Donahue Road between Thompson and Vosseller Avenues. It permits a broad range of senior citizen housing including assisted living facilities, nursing homes, continuing care retirement communities and independent senior housing. Offices and service stations are also permitted uses consistent with the highway location. Development is permitted at a moderate intensity level with a minimum lot size of 3 acres, an F.A.R. of .25, lot coverage of 40 percent and a building height of 2 stories/35 feet. Integrated Health Services currently occupies this area. There are no changes recommended for this zone.

Limited Service Commercial (C-6 Zone)

The purpose of the Limited Service Commercial District is to provide limited commercial service uses and community services that support the North Bridge Street residential neighborhood. The District is located in the Regional Center within the Bridgewater Core at the intersection of Prince Rogers Avenue and North Bridge Street. It permits service and office uses such as banks/financial institutions, professional offices, medical/dental offices, child-care centers and churches. The permitted development intensity is limited in keeping with the neighborhood character and scale of the District with a minimum lot size of 10,000 square feet, an F.A.R. of .25, a maximum lot coverage

of 70 percent and a building height of 2.5 stories/35 feet. A modification is recommended for this district. The 6th Avenue Redevelopment Ordinance was adopted on May 27, 1982. The Developer's Agreement was executed on March 18, 1985.

A new subsection 126-313.4D (C-6 Limited Service Commercial Zone) to read:

"Parking areas shall not be located within the minimum front yard setback area."

Amend Section 126-313.4C(11) to read:

"Maximum Impervious Coverage: 60%"

Hotel/Conference Center (HC)

The Hotel Conference Center District is intended to accommodate hotel, conference and catering hall development along a small portion of the Route 202-206 corridor. The District contains the Bridgewater Manor conference and catering facility and is located outside the Regional Center on the west side of Route 202-206 at the municipal border with Bedminster Township. It permits hotels, conference centers, restaurants, banquet halls and offices at a moderate intensity of development. Bulk standards include a minimum lot area of 6 acres, an F.A.R. range of .20 to .40, depending upon use, lot coverage of 60 percent and building height of up to 5 stories/60 feet. The uses remain appropriate; however, changes are recommended for building height. It is recommended that the Schedule of Area, Yard and Building Requirements following Section 126-376 (Schedule of Area, Yard, and Building Requirements) be amended in that hotels be limited to three (3) stories or 45 feet and that all other uses be limited to 2 ½ stories or 35 feet. Grandfathering of existing structures should be provided for building height and number of stories.

Special Economic Development (SED)

The purpose of the Special Economic Development District is intended to provide large-scale, planned office development in a campus setting within the Route 202-206 corridor. The two Districts contain the current AT&T corporate office campus and Aventis Pharmaceuticals located outside the Regional Center. It permits scientific research laboratories, offices, light

manufacturing and planned corporate office parks on large lots at a moderate intensity of development. The bulk standards include a minimum lot area of 30 acres, an F.A.R. of .20, lot coverage of 50 percent and a building height of 3 stories/45 feet. The uses and bulk standards are appropriate and no changes are recommended.

Medical Park District (MPD Zone)

The Medical Park District is intended to capitalize on the proximity of the Somerset Medical Center and provide a range of medically--oriented commercial, residential and public uses. The District is located on Route 28/Union Avenue immediately to the north of the Medical Center at the municipal border with Somerville Borough. The MPD zone permits a broad range of medical and dental offices, laboratories, sales offices, health service agencies, pharmacies, nursing homes and County facilities. A predominant use within the District is the Arbor Glen continuing care retirement community, which contains a variety of independent living, assisted living and skilled nursing senior citizen housing.

Recommended changes are as follows:

- A. The MPD zone allows for a number of uses that are unclear and confusing. The Board recommends that use found in Section 126-321.1A(1) (MPD Medical Park District) "concerned with the healing arts," no longer be cited as a permitted use in this zone.
- B. Add new subsection 126-321.1A(9) (MPD Medical Park District). Permitted uses: Adult medical daycare as a permitted principal use. Add new subsection 126-321.1A(12) (MPD Medical Park District): Medical related uses such as "outpatient services" as a permitted use in light of Somerset Medical Center's expansion plans.

Highway Interchange Commercial (HIC)

The purpose of the Highway Interchange Commercial District is to provide for regional-scale commercial uses that are oriented to the State highways and highway interchanges located in the Township of Bridgewater. The District is centered on the Route 22 and Foothill Road interchange and corresponds to the HIC zone. It permits offices, services and hotels/motels as principal uses and service stations, new car sales and restaurants as conditional uses subject to the

requirement that all uses must have direct access to a State highway. The District contains auto dealerships, hotels, offices and restaurants.

The bulk standards of the HIC District promote large-scale, planned development with a minimum lot area of 5 acres, an F.A.R. of .35, lot coverage of 60 percent and building height up to 3 stories/45 feet. There is also a requirement for a minimum building setback of 200 feet and conservation easements of 50 to 125 feet. Consideration should be given to require support for the Regional Center and protect adjacent residential uses to the south. Grandfathering of existing structures should be provided as to height regulations and number of stories. The following recommendations are made to address these issues:

- A. Maintain the building setback at 200 feet.
- B. Amend the buffer standards in section 126-332 (Minimum Buffer/Conservation Easement Distance Requirements) for the District to increase the buffer easement requirements to adjacent residential zone boundaries from 50' to 75'.
- C. Eliminate personal service uses to maintain consistency with the regional commercial orientation of the District.
- D. Add new subsection 126-314.1A(3) (HIC Highway Interchange Commercial Zone) to allow restaurants as a permitted use in the HIC zone, with the exclusion of drive-in and drive-through fast food type establishments which shall be prohibited.
- E. Amend section 126-314.1H(10) Maximum Building height to three stories or 45 feet for all uses.

Village Center (VC)

The Village Center District is intended to promote the development of a planned, mixed-use center in a traditional village setting that functions as a shopping, entertainment and service destination. The District is located outside the boundaries of the Regional Center on Route 22 at Chimney Rock Road and corresponds to the VC zone. It currently permits a mixed-use approach and permits commercial uses such as theaters, restaurants, commercial recreation facilities, retail, services, professional offices, residential uses such as multi-family apartments and single-family townhouses, and public uses such as community centers, parks and open space.

To date, the District has remained undeveloped because of multiple factors that include market conditions, environmental constraints, isolated location, limited access and impacts from adjacent heavy industrial uses. It is necessary to evaluate the current land use designation for the District because of these factors and its location outside of the Regional Center growth boundary, the potential for continuing negative impacts on residential uses from operations of the Stavola Quarry, the planned Route 22/Chimney Rock Road interchange project and lack of mass transit service.

A portion of the quarry fronts on Route 22 and is located within the Village Center (VC) zone which is the zone that was developed in 1991 for the redevelopment of the 45 acre GAF tract located just east of the quarry. The GAF site has frontage on Route 22, Chimney Rock Road and Thompson Avenue and is bisected by the Middlebrook Crossing. The VC zone is a complex zone that allows regionally oriented village centers with a mix of land uses. Prior to the creation of the VC zone, the GAF property was located in the M-1A zone. A portion of the Stavola quarry is also in the VC zone.

The Master Plan also recognizes that the County and Township are developing a shared public works facility on approximately 15 acres of the quarry located along Chimney Rock Road and major improvements to the Chimney Rock Road and Route 22 interchange are under design.

The District appears to be suited for uses that do not create hardships on future residential properties, will capitalize on its high visibility highway location, access to the planned Route 22/Chimney Rock Road interchange. It is noted that the VC zone bifurcated Block 711, Lot 7, located on Frontier Road. The lot is in close proximity to the new interchange. It is feasible for the owners of Block 711, Lots 6 and 7 to partner in creating a meaningful destination offering. Towards this end, the following recommendations are made:

- A. Modify the zone mapping line for the VC zone to include all of Block 711, Lot 7 as well as the skating rink, Stavola office and Chimney Rock Inn.
- B. Modify the current zoning and permitted uses for the District in recognition of the limitations of the village center concept at this location. Eliminate the residential use from the permitted

use in the VC zone by deleting subsection 126-320.1A(2) (VC Village Center Zone) and subsections 126-320.1G(6) (VC Village Center Zone) and limitations to hotel uses found in subsection 126-320.1J (VC Village Center Zone).

- C. Establish bulk and site plan standards to the VC zone that require new uses to have a low-intensity character, low-rise building profile and access to Route 22 via the future interchange.
- D. Amend the first paragraph of Section 126-320.1 (VC Village Center Zone) to delete the words:
 - "...of attractive, mixed-use village centers..."
- E. Amend Section 126-320.1 (VC Village Center Zone) to rename VC Village Center Zone to LC Limited Commercial Zone and revise throughout the Ordinance.

Zone standard amendments are recommended as follows:

- A. Maximum Impervious Lot Coverage: 60% (amend Sections 126-320.1(C.6) (VC Village Center Zone))
- B. Maximum F.A.R.: Amend Section 126-320.1(C.8) (VC Village Center Zone) to .30
- C. Reduce the Maximum Building Height to: 3 stories or 45 feet max in height for all uses. (amend Section 126-320.1(C.7) (VC Village Center Zone))
- D. Parking Standards for Theater is that found in Section 126-169 (Off Street Parking Requirements for Particular Uses) (amend Section 126-320.1D.4 (VC Village Center Zone) accordingly).
- E. Amend Section 126-320.1.C (5) (VC Village Center Zone) to read:
 - "Minimum Building Setbacks: One hundred (100) feet from the right-of-way."
 - Delete all other provisions in this subsection.

Due to the proximity of the quarry and the historic nature of the use, it is recommended that the existing skating rink, restaurant of the Chimney Rock Inn land and adjacent Stavola offices located on Chimney Rock Road be added to the VC district. This involves Block 801, Lots 43, 44 and 45. These lots are currently in the residential R-20 zone.

Lots involved in this recommendation are:

Block 730, Lots 1 through 3

Block 711, a portion of Lot 6

Block 711, Lot 7, 8, 9, 10

Block 235, Lot 6

Block 801, Lots 43, 44, 45

Industrial Land Use Districts

The Township of Bridgewater has multiple industrial districts that are a remnant of its past industrial development and that accommodate a broad range of manufacturing, warehousing/distribution and research/laboratory uses. The districts are concentrated within the southern section of Bridgewater in the Regional Center and are known as the Limited Manufacturing, General Manufacturing and Quarry Industrial Districts. Consistent with regional trends, Bridgewater's industrial development has evolved over time from an emphasis on heavy manufacturing clustered along the former Central Railroad of New Jersey Main Line to cleaner, truck-based warehouse and distribution uses and light manufacturing uses oriented to the regional highway system.

Heavy industrial activity such as the former American Cyanamid complex on Main Street has given way to lighter industrial uses such as the UPS distribution hub on Route 28/Union Avenue. The primary exception to this trend is the Quarry Industrial District where Stavola Construction Materials has an established quarry and mining facility with at least five decades of projected capacity, according to Stavola representatives.

It is anticipated that Bridgewater's remaining industrial and manufacturing activity will continue to decline because of changing markets, domestic and foreign competition as well as the long-term trend of relocation to lower cost Sunbelt and overseas jurisdictions. This is also reflected by the reduction in remaining available properties for industrial purposes from 54 in 1996 to 49 in 2002, which represents a decrease of 5 parcels or 9.3 percent. There are opportunities, however, to capture higher technology and value added industrial development generated by the medical, health care and pharmaceutical industry clusters found in the Regional Center.

There are also opportunities to return vacant and/or underutilized industrial properties to productive use through redevelopment, as has been done in the East Gateway and Route 22 corridor. Consistent with this, the Township policy to "encourage the revitalization and modernization of large industrial tracts which are no longer viable for industrial or manufacturing uses" remains valid.

Limited Manufacturing

The Limited Manufacturing District is intended for light manufacturing, distribution and office development in areas with access to major highway corridors. The District corresponds to the M-1, M-1A and M-1B zones and is located on Route 22, Route 202. It permits manufacturing, research laboratories, warehouses, truck terminals, storage yards and business offices as well as some limited commercial uses. The District lacks a coordinated and coherent land use pattern and is highly transitional in nature as older heavy industrial uses are replaced by new light industrial and commercial uses. This is especially the case in the Chimney Rock Road corridor, including the Middlebrook Crossroads Industrial Park and former Central Jersey Industrial Park.

The Township Zoning Board of Adjustment has granted a number of use variances during the past several years for uses such as commercial recreation that are in demand and well-suited to adaptive reuse of existing industrial structures. Consideration should be given to expanding the range of permitted uses consistent with this trend and further restricting heavy industrial uses to facilitate the on-going transition to light industrial, heavy commercial and office activity. Other issues in the District include monitoring the long-term viability of industrial uses in the M-1 zone such as the Fischer Scientific site, recognizing the on-going transition of the M-1A zone due to the increasing downturn in industrial development patterns.

The specific recommendations for the Limited Manufacturing District are as follows:

A. M-1A Zone-Foothill Road/Main Street:

There is an area in Finderne located just west of the Bridgewater Promenade that is in an M1-A zone. The recent redevelopment of this area including the Promenade and the Commerce Bank Ballpark has changed the character of this part of the Township. The area in discussion is bounded by Route 28 to the north, Main Street to the south, Foothill Road to the east, and Chimney Rock Road to the west. The existing M1-A zone allows trucking terminals, warehouses, building material storage yards, manufacturing and other uses that could be detrimental to the continued upgrade of this area. In an effort to encourage additional investment in this area, it is recommended that a portion of the M1-A zone be

studied to examine other uses which would be consistent with uses complementary to adjacent uses.

B. M-1A Zone-North of Route I-287:

A portion of the M-1A zone also extends from I-287 north to Route 22. This is the area that includes most of the Middlebrook Crossing and Bridgewater Industrial parks. A number of efforts have focused on the future revitalization of this area as the East Gateway into the Township. The District permits all permitted and conditional uses in the GCM zone and in addition the following: Trucking terminals, warehouses, building material, storage yards, essential services and agricultural uses.

It is recommended that building material storage yards and agricultural uses cited in Section 126-316.A(7) (M-1A Manufacturing Zone) be eliminated as a permitted principal use.

Section 126-376 (Schedule of Area, Yard, and Building Requirements) should be amended to modify building heights in the M-1A zone as follows:

1. M-1A maximum building height be modified from 3 stories/45', to 2 stories/35'. There should be a grandfathering of existing structures as to height and number of stories.
2. Maximum Percent of Improved lot coverage should be reduced from .60 to .50

C. M-1 Zone:

The required buffers/conservation easements designed to protect existing residential zones should be revised to ensure that sufficient protections are provided. Section 126-332 (Minimum Buffer/Conservation Easement Distance Requirements) for the required buffer for the M-1 zone should be modified from 50 feet to 100 feet.

Section 126-375 (Schedule of Yard and Area Requirements) should be amended as follows:

The maximum building height should be modified from 3 stories/45 feet to 2 stories/35 feet. There should be a grandfathering of existing structures as to height and stories. Maximum Percent of Improved lot coverage should be reduced from .60 to .50

The permitted use of agricultural or horticulture found in Section 126-315A(2) (M-1 Limited Manufacturing Zone) should be eliminated from the zone.

Other planning and zoning recommendations for the Limited Manufacturing District are the following:

- A. Amend the zoning for the M-1A and M-1 District to expand the range of appropriate commercial opportunities that are permitted consistent with recent development trends and to provide opportunities for reuse of vacant or underutilized industrial properties. Proposed permitted uses to be added to the M-1A and M-1 districts include multi-media production such as graphic design and web-based services, high-technology business incubation, adult medical daycare, and limited retail uses subject to the requirement that they are accessory in size and scale to permitted uses, such as the recently approved home furnishings warehouse in the former Middlebrook Crossroads Industrial Park. Providing sufficient parking is a critical component in the recommendation, which must be considered by the reviewing Board. Parking should conform to standards found in Section 126-169.
- B. Amend the section dealing with M-1A permitted uses as follows: Remove Subsection 126-316-A2 (M-1A Manufacturing Zone) and place this Subsection as a conditional use under 126-316-C.3 (M-1A Manufacturing Zone). The reason for this recommendation is that the Ordinance permits the Conditional Uses in the GCM zone as permitted uses in the M-1A zone.
- C. Amend Section 126-317 (Limited Manufacturing Zone, small lot) to add new Section 126-317.C (4) (Ambulatory Services) as a conditional use.
- D. Add new Section 126-351.4 (Ambulatory Services) to add conditions for ambulatory care services as follows:
 - "Ambulatory care services
 - Ambulatory care service shall comply with all bulk standards of the district in which it lies and all additional requirements of the zone as found in Section 126-317.D except for the following:
 - A. A minimum of 100 feet landscaped buffer with a minimum of a 3' high berm shall be installed on all perimeter sides abutting a residential use or residential zone.

- B. The applicant is required not to initiate sirens within a minimum of 500 feet of the property on which the service lies.
 - C. Required parking shall be based on the office use standard.
 - D. There shall be no emergency vehicles stored outside.
 - E. Outside parking shall be 1 space for each emergency vehicle or 300 square feet of garage area plus any other uses such as offices."
- E. Amend the buffer (Section 126-332 (Minimum Buffer/Conservation Easement Distance Requirements)) for all zones in the M-1, M-1A, and M-1B districts from 50 feet to 100 feet to protect abutting residential uses.

General Manufacturing (M-2)

The purpose of the General Manufacturing District is to accommodate most forms of industrial activity including but not limited to manufacturing, research, distribution and associated offices. The District is located in Finderne within the Regional Center between Main Street and the Raritan River. This area evolved into a vibrant manufacturing zone during the early 1900's due to its location along railroad lines. It became home to several large manufacturing facilities such as Calco, Singer and National Starch. The District permits manufacturing, research laboratories, radio and television stations and warehouses including mini-storage. The planned commercial development of corporate office complexes with accessory retail, conference centers and restaurants is also a permitted conditional use.

The District has experienced declining industrial activity, vacant and underutilized properties, environmental contamination and the presence of incompatible residential uses. As a consequence, it is undergoing a planning transition due to the continuing loss of heavy manufacturing uses, environmental limitations and County plans for the Raritan River Greenway. Other factors influencing the land use pattern in the District include site remediation at the American Cyanamid/Wyeth superfund site, the traffic improvement initiative in the Chimney Rock Road corridor and long-term plans by NJ Transit to reactivate commuter rail service on the West Trenton Line.

Substantial vacant warehousing exists in areas west of the mini-warehouse on Finderne Avenue. Review of options for expanded uses is appropriate if these uses utilize the assets of the rail and the unique location of the property which could be used without intrusion into residential areas. However, this is not to include transfer stations.

Specific recommendations for the M-2 zone include the following:

- A. Amend the residential buffer (Section 126-332 (Minimum Buffer/Conservation Easement Distance Requirements)) from 50 feet to 100 feet to protect adjacent residential uses.
- B. The M-2 zone includes a large portion of Finderne located south of Main Street. The majority of the property in this zone is the former American Cyanamid/Wyeth site extending to the Raritan River. In recent years, Somerset County has purchased over 100 acres to the west of the American Cyanamid/Wyeth property for recreation and open space purposes. The area acquired by the County should be placed in the Public (P) zone. Discussions are ongoing with the current owners of the American Cyanamid/Wyeth property relating to the development of recreational and other uses.
- C. Transfer stations should be specifically prohibited in this zone.
- D. Amend Section 126-375 (Schedule of Area, Yard Requirements) to limit the Maximum Improved Lot Coverage from .60 to .50.
- E. A portion of the M-2 zone extends from Radel Avenue to Main Street including the former Baker and Taylor offices. The Baker and Taylor offices have been vacant for a number of years. Most of the property along Radel Avenue is used by Weyerhaeuser Company for the storage and distribution of lumber through the granting of a use variance from the Zoning Board of Adjustment. The surrounding uses in this area are single family, R-10 or multi-family residential (R-40 MDU-1). It is recommended that the portion of the M-2 zone that includes the existing vacant office building, Weyerhaeuser facility, and associated parking be placed into a new zone to be designated as Senior Citizen Residential (SC). The remainder of the area would continue to remain in the M-2 zone. A Senior Citizen district should be placed on this area with the following development standards:

Senior citizen housing developments (detached units, patio houses, zero lot line houses and townhouses) should be a permitted use. The following development criteria must be met:

- (1) Minimum lot area: 17 acres.
- (2) Minimum lot width: 100 feet.
- (3) Maximum density: 13 units per acre.
- (4) Minimum parking: 2.0 spaces per unit.
- (5) Maximum lot coverage: 50%
- (6) Maximum F.A.R.: .60
- (7) Maximum building height: 2 ½ stories or 35 feet.
- (8) Minimum tract buffer around perimeter of tract: 25 feet from the tract (all perimeter) property lines.
- (9) Minimum front yard setback: 20 feet (internal); 75' from Route 28.
- (10) Minimum rear yard setback: 25 feet.
- (11) All windows are triple glazed to address noise attenuation.
- (12) Each unit must be served by central air conditioning.
- (13) The project must have at least 6 buildings with no more than 6 dwelling units; at least 14 additional buildings with no more than 10 dwelling units and the balance of the units shall have no more than 14 dwelling units in any building.
- (14) Access to the site shall be restricted to direct entrance from Route 28 through Lots 3.01 and Lot 14 and by way of Radel Avenue to Newberry Street. There shall be no access onto Ramsey Street, Riha Street, Field Street or Manville Boulevard, except for emergency access purposes. Access is also permitted on Newberry Street.

The lots recommended to be changed to the Senior Citizen Residential zone are:

Block 329, Lots 14, 3.01, 13.01

General Commercial and Manufacturing (GCM)

A. The following uses should be eliminated from the GCM zone:

(1) 126-314.A (2) (GCM General Commercial and Manufacturing Zone) Manufacturing, laboratory, printing and publishing uses

(2) 126-314.A (3) (GCM General Commercial and Manufacturing Zone) Research laboratories

B. The GCM zone amend the permitted use "manufacturing" to read: "light manufacturing".

Re-designation of a portion of GCM district to be amended to be designated to the R-40 district.

Highland Avenue is locally viewed as a neighborhood street. As such, the residents have expressed concern that increased non-residential development will erode the character of the residential uses along Highland Avenue as well as the intersecting neighborhoods off Somerset Street, Prospect Avenue, Hillside Avenue, Ash and Grove Streets. The Planning Board concurs.

The following lots are affected by this re-designation:

Block 532, Lots 30, 31, 32.

Quarry Industrial M-3 Zone

The M-3 zone was specifically developed to govern the operation at the Stavola Quarry. Quarrying, essential services, and agriculture are the only permitted uses in the zone. The M-3 zone should remain in place to allow the quarry to continue to operate as a permitted use. It is understood at this writing that there are approximately 50 years of viable quarrying operations left at this site. There are no revisions recommended for this district.

Public Use

The Public/Semi-Public District encompasses all major public uses in the Township of Bridgewater such as municipal facilities, schools, County buildings as well as NJ Transit stations. The District corresponds to the P and P-2 zones which permit public, institutional and community service uses including municipal facilities, parks and schools. It is recognized that there is a need for an upgraded Township municipal complex to consolidate local government functions, provide public meeting space and establish a civic focal point. The P-3 zone should be collapsed into the P zone with consolidation of permitted and conditional uses.

In addition, the "Darby Tract," a Green Acres site, is particularly suited to this rezone recommendation. The Darby Tract is Block 426, Lots 12, 14.

The following municipally-owned lots should be added to the Public (P) district:

Block 100, Lots 2, 3, 4, 5

Block 101, Lot 1

Block 102, Lots 1.10, 2.02, 8, 9, 10, 39

Block 108, Lots 1, 2

Block 122, Lots 1, 2, 3, 4, 11

Block 426, Lots 12, 14

Somerset County Parks

Somerset County is the owner of a number of large county parks throughout the Township. Only North Branch Park on Milltown Road is properly designated within the P zone. Both Duke Island Park and Washington Valley Park that are each large regional parks are located within residential zones.

Duke Island Park, the Chipman tract, north of Old York Road, the Wayne and Robert Street areas, and Washington Valley Park should be placed within the Public and Institutional (P) zoning district. These lands are all owned by the Township or Somerset County.

DESIGN STANDARDS

DESIGN STANDARDS FOR DEVELOPMENT OF PROPERTIES HAVING FRONTAGE ON ROUTE 202, ROUTE 202/206 NORTH, ROUTE 22, AND ROUTE 28

A new Ordinance section should be established:

"Design Standards for Development of Properties Having Frontage on Route 202, Route 202/206, Route 22, and Route 28"

General

- A. Parking should be behind the minimum front yard setback and cross easements to adjoining properties should be provided.
- B. A solid fence is less desirable than a landscape buffer. Natural landscaping is preferred over fencing.

Building Design

The objective of the building design standards is to provide overall high quality and complementary design of buildings. The exterior appearances of buildings shall complement the character of existing development in the surrounding area.

Building Mass

- A. Solid or unarticulated buildings are discouraged. Where practical, the effects of mass and scale of buildings may be reduced by introducing staggered building walls, addition of dormers, or other architectural treatments.
- B. Buildings with expansive blank walls facing the roadway are to be discouraged.
- C. Building mass should be consistent with the mass of the area.
- D. Building entries shall be readily identifiable through the use of canopies and architectural treatment.
- E. Wall texture changes may be provided so long as it does not detract from the principal character of the building.
- F. Small-scale elements, such as planter walls and hedges, are encouraged to be clustered around building entrances.

- G. The intensity of development (F.A.R.) along the corridors should be held tightly to the ordinance standards.

Materials

- A. Design standard for commercial building should be brick or stone rather than metal or cinder block.
- B. One dominant material shall be selected and used as a theme for each building on a site and including construction of solid waste enclosures.
- C. The front face of the structure and any face which is visible from the highway should be constructed principally with brick or stone. Drivet or split rib block may be used as an accent (less than 10% of the façade should be of this material).
- D. Clapboard siding is also an acceptable siding treatment on Route 28 and 202/206 North.
- E. Roof design shall be as aesthetically pleasing as possible (e.g. color, material, grouping) to minimize visual impact to adjacent uses and particularly residences.
- F. An effective Skirted HVAC system treatment is required on rooftops. A "widow's walk" or dormered appearance around these units is required.
- G. Glass windows or some similar architectural treatment shall occupy more than 15% but less than 30% of the front elevation of a building, not including parapet area.
- H. Design preferences include grille windows, French doors, and transoms.
- I. Design treatments which do not meet the desired characteristics are:
 - (1) Large plate glass windows without grilles.
 - (2) Front yard parking without landscape berms as a buffer.
 - (3) Massive structures which are out of scale with surrounding area.
 - (4) Flat, shed and mansard roofs are not recommended; gable roof designs are encouraged.
 - (5) Aluminum siding, metal panels and mirrored glass surfaces are discouraged.
 - (6) Metal awnings are discouraged. Awnings should be solid or striped canvas.

Color and Texture

- A. Variations in color on the building shall be kept to a minimum.

- B. Subdued earth tones are preferred.

Front Yard Buffers along Route 202, 202/206 North, Route 22 and Route 28

- A. Landscaped front yard buffer areas separating the parking and/or building from the traveled way shall be provided for all non-residential uses. Front yard landscaping shall be shown on the landscape plan and planted with grasses, deciduous trees, and evergreens or constructed of berms, boulders, mounds or combinations which will enhance the appearance of the site, and as approved by the Planning Board. In addition to required landscaping, front yard landscaping along these corridors shall require a minimum of 8 shrubs for every 30 feet of frontage. If a landscaped berm is provided, the berm shall be at least 3 feet higher than the finished elevation of the parking lot and planting requirements may be reduced to five shrubs for every 30 feet of frontage. A minimum of three rows of plantings shall be provided in this area. Front yard landscaping may be waived by the Board where existing natural growth is found to be sufficient to meet the objectives of this section and where year round leaf display is achieved. No buildings, structures, accessory structures, parking, driveways, loading areas or storage of materials shall be permitted in the landscaped front yard. Access driveways, utilities, fences and security structures may be permitted by the Board. Species selection shall be in accordance with this Ordinance.
- B. Front yard landscaping shall not interfere with any required traffic sight distances as established by the Township Engineering Department and shall not preclude a driver's view of approved sign locations on a commercial site where such view, as determined by the Planning Board, is either necessary to the legitimate economic functions of the site or where traffic safety factors are involved.
- C. Modify Section 126-191 (Landscaping) to read: "A landscaping plan shall be submitted with each site plan or subdivision."
- D. Add new subsection 126-191B(13e) (Landscaping) to read: "Species selection shall be in accordance with this Ordinance."
- E. Delete subsections 126-191B (16, 17, 18, 19) (Landscaping)

LANDSCAPING IN ALL TRANSITION BUFFERS

(NON-RESIDENTIAL ZONE ABUTTING A RESIDENTIAL ZONE DISTRICT)

A new section shall be added to 126-191C (Landscaping):

- A. Design of Transition Buffers. Arrangement of plantings in buffer areas shall provide maximum protection to adjacent residential properties. Planting arrangements include planting in parallel, serpentine or broken rows. If planted berms are proposed, the minimum top width shall be 4 feet and the maximum side slope shall be 2:1.
- B. Transition Buffer Planting Specifications. At least 3 plants shall be provided for every 10 feet of length along the residential line. All plantings shall be installed according to accepted horticultural standards. The buffers shall be planted with evergreens and deciduous trees as follows, subject to approval or modification of the Board:
 - (1) The transition buffer shall be planted with masses and groupings of shade trees, ornamental trees, evergreen trees and shrubs. No less than 75 percent of the plants shall be evergreen trees with a minimum installed height of 6 feet. A fence or wall may also be required within the transition buffer if a solid screening would not be achieved in 3 years of plant growth. Said fence shall not exceed a 6 foot height in the side or rear yard and not exceed 4 foot height in the front yard. The fencing shall be an attractive fence which is compatible with the neighborhood. Stockade fencing shall not be used.
 - (2) More than one type of evergreen species shall be used.
 - (3) Where a fence is required, plantings shall be placed along the outside perimeter of the fence (facing the residential side) but not closer than 5 feet from the fence. A solid fence should not be used as the sole treatment mechanism in transition buffer areas.

LANDSCAPING REQUIREMENTS FOR ALL ZONES

General - New Section 126-191C (Landscaping)

- A. With the exception of the building footprint for the principal structure(s) and a twenty-foot margin around the principal structure(s), all reasonable and practicable efforts shall be made to preserve existing mature trees on the site. Planned driveway(s), walkways, garage and all other accessory structures should be located so as to allow for the preservation of the greatest number of existing mature trees on the site, with the greatest priority given to preserving very large, unique, or "specimen" trees.

- B. Grading shall be avoided within the dripline of any tree that is to be preserved, including trees on adjacent property if the drip line of those trees extends into the applicant's property. If a tree is of a species or type that will eventually perish due to root disturbance or change in drainage, the tree may be removed, but must be replaced in accordance with this ordinance. In the event that tree removal is requested and the Board believes some may be preserved, the applicant shall provide expert opinion from a licensed landscape architect who will address the viability of maintaining such trees.
- C. Trees shall not be removed from an area within 25 feet of the edge of any stream, including seasonal or intermittent streams.

Landscaping Trees – Landscaping trees within the property shall be planted at a rate of three trees per 5,000 square feet of disturbed lot area. At least fifty percent of all these species shall be selected from the Deciduous Shade Trees list and the balance may be selected from the Landscaping Trees list.

Shrubbery – In addition to the above, shrubbery shall be planted at a ratio of ten shrubs per 5,000 square feet of impervious area. Shrubbery shall be taken from the Evergreen Species list – Medium Sized. Variety is required to prevent the future die-out of large numbers of evergreens, in case a disease kills off a particular tree species.

Buffer Planting – Evergreen species shall be planted in double rows in a zigzag fashion along the buffer line to provide a dense screen upon 3 years of growth. When evergreens are placed along distances of greater than 100 feet of a buffer line, two or more species or cultivars of evergreens shall be provided in staggered rows. When evergreens are being placed distances of less than 100 feet along a buffer line, one or two species or cultivars of evergreens shall be provided in staggered rows. Buffer planting shall be in addition to other required landscaping. See appropriate sections for species selection.

Foundation Planting - In addition, foundation landscaping (located within 5 feet of the foundation) shall be provided at a rate of ten shrubs per 20 linear feet of foundation. Species shall be selected from the Foundation Planting list.

Provisions for Parking Lots

- A. One shade tree measuring a minimum caliper of 2-1/2" shall be provided for every 10 parking spaces in the vicinity of the parking lot. The preservation or relocation of existing trees is

encouraged to meet this requirement. This planting is in addition to trees required for landscape, buffers or street tree planting.

- B. Curbed planting island of at least 4 feet in width shall be placed at the end of each row of parking spaces along an internal traffic aisle.
- C. A maximum of twenty parking spaces shall be permitted in a row without a curbed planting island.
- D. Landscaping shall be selected so that the mature height will not cause concerns of obstructing vision.

Standards and Requirements for Tree Protection During Construction, Demolition, Grading, or Soil Removal

- A. Before clearing, demolition or construction work of any kind is begun on a site, temporary fencing, a minimum of 4 feet in height, shall be installed around all trees or clusters of trees that are to be preserved according to the approved tree plan, including street trees in the public right-of-way, and trees on adjacent property if they are within 10 feet of the common property line, or if the dripline of those trees extends into the applicant's property. The required temporary fencing shall be installed at the dripline or at a 10 foot radius from the trunk, whichever is greater.
- B. No soil or other materials shall be stored within the protected area. No equipment shall be operated or cleaned within the protected area. No chemicals, fuel, oil or other foreign materials may be deposited onto the ground in the protected area.
- C. If the Township Engineer agrees that constraints in a particular area(s) of a site make it necessary to operate equipment within the dripline of a tree that is to be protected, the trunk of the tree must be protected with metal sheathing, and the ground area within the dripline must be covered with metal plates before equipment is operated there.
- D. No signs or other materials shall be affixed to trees in any manner. No nails, screws or other intrusive fasteners shall be used on a tree.

Trees Damaged After Approval

Any tree designated on the tree site plan as a tree to be preserved that is determined by the Engineer to have been damaged in any manner during demolition, construction, grading, or landscaping activities, including trees likely to die because of root disturbance or changes in drainage, shall be replaced by the builder and planted at locations agreed upon by the Engineer, according to the formula in Section 126-278.10 (Violations and Penalties; Restitution).

Tree Species, Selection and Planting Criteria

- A. Trees must be straight, balled and burlapped, nursery-grown, free of all wounds or other damage, and meeting ANLA (American Nursery and Landscape Association) standards.
- B. Trees shall not be planted under power lines or near other obstructions such as overhangs, telephone poles, utility pipes and fire hydrants.
- C. Street trees shall be installed 3 feet inside the property line so that the trees will not interfere with overhead utility lines and sidewalks. Shade tree easements shall be provided for installation and maintenance purposes.

Acceptable Deciduous Shade Trees (includes street trees)

Acceptable species and cultivars of major, deciduous shade trees shall include:

Honeylocust

All forms of Thornless Honeylocusts, such as *Gleditsia triacanthos inermis*
Shademaster - 60-70' h)

Linden (Crown width is generally about 1/2 to 2/3 height)

Greenspire Littleleaf Linden (*Tilia Cordata* Greenspire - 60'-70' h)

Green Mountain Silver Linden (*Tilia tomentosa* Green Mountain - 50'-60' h)

Crimean Linden (*Tilia euchlora* - 40'-60'h)

Redmont Linden (*Tilia americana* Redmont - 65'-75' h)

Locust

Thornless Honey Locust (*Gleditsia triacanthos*)

Maples (Crown width is generally slightly less than or equal to height)

October Glory Maple (*Acer rubrum* October Glory - 50'-60' h)

Red or Scarlet Maple (*Acer rubrum* - 50'-75' h)

Red Sunset Maple (*Acer rubrum* Red Sunset Maple - 50'-60' h)

*Sugar Maple (*Acer saccharum* - 50'-75' h, width 2/3's)

*Green Mountain Sugar Maple (*Acer saccharum* Green Mountain - 50'-75' h)

*Bonfire Sugar Maple (*Acer saccharum* "Bonfire," - 50'-70' h)

Oak (Crown width is generally comparable to or slightly greater than height)

Northern Red Oak (*Quercus borealis* [rubral] - 75'-95' h)

White Oak (*Quercus alba* - 80'-90' h, 50'-80' spread)

Sawtooth Oak (*Quercus acutissima* - 75'-90' h)

Scarlet Oak (*Quercus coccinea* - 75'-90'h)

Shingle Oak (*Quercus imbricaria* - 65'-75' h)

Shumard Oak (*Quercus shumardii* - 75'-90' h)

Pear

Redspire Pear (*Pyrus calleryana* Redspire - 30'-35' h)

**Pin Oak

(*Quercus palustris* - 75'-100' h)

Because of its low-branching effect, which ultimately becomes dead branches, pin oaks do not make good shade trees around parking lots.

Also known as Swamp Oaks, Pin Oaks like wet soils and are excellent candidates for planting along wetland borders, stream corridors, etc., or within lawn areas.

** Willow Oak

(*Quercus phellos* - 50'-70' h)

These have similar characteristics to Pin Oaks.

Zelkova (Crown width is generally equal to height)

The Zelkova is similar to our native Elm and thrives in urban settings.

Green Vase Zelkova (*Zelkova serrata* Green Vase - 60'-70' h)

Japanese Zelkova (*Zelkova serrata* - 50'-60' h)

Village Green Zelkova (*Zelkova serrata* Village Green - 50'-60'h)

Ohio Lacebark Elm, *Ulmus parvifolia* "Ohio" (20' h)

Hackberry, *Celtis* spp.

Ginkgo *Ginkgo biloba* (male only)

Blackgum *Nyssa sylvatica*

*Not acceptable for parking lot use

**All not acceptable for parking lot use

Non-Acceptable Species of Deciduous Shade Trees

Ash (Crown width of Ash is generally similar to height) (Disease prone/short-lived)

Newport Ash (*Fraxinus lanceolata* Newport - 50'-60' h)

Greenspire Brand American Ash (*Fraxinus americana* Greenspire - 60'-70' h)

Autumn Purple Ash, seedless (*Fraxinus americana* Rosehill - 60'-70' h)

Patmore Ash (*Fraxinus americana* Patmore - 50'-60' h)

Summit Ash (*Fraxinus americana* Summit - 50'-60' h)

White Ash *Fraxinus americana*

Pear

Bradford Callery Pear (*Pyrus calleryana* Bradford - 25'-35' h)

Capital Pear (*Pyrus calleryana* Capital - 35'-40' h)

Whitehouse Pear (*Pyrus calleryana* Whitehouse - 30'-35' h)

Marshall's Seedless Ash

No longer "seedless." This tree now appears to be producing seeds.

Norway Maple

(*Acer platanoides*)

The roots of the Norway Maple (regular or columnar) grow near the surface and can uproot sidewalks. Invasive, non-native.

Silver Maple

Similar to Norway Maple. Silver Maples are susceptible to various insects and diseases. The tree has very weak branches.

Sycamore

(*Platanus acerifolia orientalis* - 70'-80' h)

Also known as the London Planetree, Sycamores do not make good shade trees since they provide only light shade and drop large seed pods.

Landscaping Trees (interior of site)

Acceptable Varieties of Landscaping Trees

Cherry

Accolade Flowering Cherry (*Prunus Accolade* - 30'-40' h)

Sargent Cherry (*Prunus sargentii* - 30'-40' h)

Columnar Sargent Cherry (*Prunus sargentii columnaris* - 30'-40' h)
High branched or tree form Kwanzan Cherry (*Prunus serrulata* Kwanzan-30'-35' h)
Rosy Cloud Cherry (*Prunus serrulata* Rosy Cloud - 20'-25' h)
Canada Red Cherry (*Prunus virginiana* Shubert - 20'-25' h)
Yoshino Cherry (*Prunus yedoensis* - 30'-35' h)

Crabapple

Siberian Crab (*Malus baccata* - 20'-25' h)
Columnar Siberian Crab (*Malus baccata columnaris* - 22'-25' h)
Radiant Crab (*Malus radiant* - 12'-15' h)

Maples

Hedge Maple (*Acer campestre* - 20'-25' h)
Amur Maple (*Acer ginnala* - 20'-25' h)
Tatarian Maple, (*Acer tataricum* (tree form))
Japanese Maple (*Acer palmatum*, - 6'-20' h)

Shadblow (Serviceberry)

Pink Shadblow (*Amelanchier Robin Hill Pink* - 20'-30' h)
Cumulus Shadblow (*Amelanchier Hybrida "Cumulus"* - 20'-30' h)

Scholartree (Crown width is generally comparable to height)

Also called Pagodatree
Chinese Scholartree (*Sophora japonica* - 30'-40' h)
Princeton Upright Scholartree (*Sophora japonica* Princeton Upright - 40'- 50' h)
Regent Brand Scholartree (*Sophora japonica* Regent - 40'-50' h)

Tree Lilac

Japanese Tree Lilac (*Syringa amurensis japonica* - 25'-30' h)
Regent Brand Japanese Tree Lilac (*Syringa amurensis japonica* Regent - 25'-30' h)
Ivory Silk Tree Lilac (*Syringa amurensis japonica* Ivory Silk - 20'-25' h)
Flowering crabapple (*Malus* spp.)
Flowering dogwood (*Cornus florida*)
Thornless honey locust (*Gleditsia triacanthos*)
Beech (*Fagus grandifolia*)
European hornbeam (tree form) (*Carpinus betulus*)

Hawthorn (*Crataegus* sp)
London plane tree (*Platanus x. acerifolia*)
Yellow poplar (*Liriodendron tulipifera*)
Eastern redbud (*Cercis canadensis*)
River birch (*Betula nigra*)
Sugar maple (*Acer saccharum*)
Serviceberry (*Amelanchier canadensis*)
Sweetgum (seeded or seedless) (*Liquidambar styraciflua*)
Weeping willow (*Salix babylonica*) (to be used only in areas adjacent to surface waters)

Unacceptable Varieties of Landscaping Trees

Green ash (*Fraxinus pennsylvanica*)
Paper birch (*Betula papyrifera*)

Acceptable Evergreen Species, Larger-Sized

Evergreen Species, Larger-sized

Cypress

Leyland Cypress (*Cupressocyparis leylandii* - 60'-70' h)

Douglas Fir

(*Pseudotsuga taxifolia (douglasi)* - 70'-80' h)

Hemlock

Canadian Hemlock (*Tsuga Canadensis* – 75'-90' h)

Spruce

Norway Spruce (*Picea excelsa [abies]* - 80'-100' h)

Colorado Spruce (*Picea pungens* - 60'-80' h)

Colorado Blue Spruce (*Picea pungens glauca* - 60'-70' h)

Serbian Spruce (*Picea omorika* – 80' h) (good replacement for Canadian Hemlock)

White Fir

(*Abies concolor* - 50'-70' h)

Evergreen Species, Medium-Sized

Arborvitae

Dark American Arborvitae (*Thuja occidentalis nigra* - 25'-40' h)

Cypress

False Cypress (*Chamaecyparis pisifera*)

Blue False Cypress (*Chamaecyparis pisifera veitchii* - 22'-25' h)

Lawson False Cypress (*Chamaecyparis lawsonia* - 18' h)

Eastern Redcedar

(*Juniperus virginiana* - 35'-40' h)

Princeton Sentry Brand redcedar (*Juniperus virginiana* Princeton Sentry - 25'-30' h)

Skyrocket Juniper (*Juniperus virginiana* Skyrocket - 35'-40' h)

Juniper

Blue Columnar Chinese Juniper (*Juniperus chinensis columnaris*
[*pyramidalis*] - 15'-20' h)

Eastern Redcedar (*Juniperus virginiana* - 35'-40' h)

Princeton Sentry Brand Redcedar (*Juniperus virginiana* Princeton Sentry - 25'-30' h)

Skyrocket Juniper (*Juniperus virginiana* Skyrocket - 35'-40' h)

Yew

Upright Japanese Yew (*Taxus cuspidata capitata* - 25'-40' h)

Hicks Yew (*Taxus media hicksii* - 10'-12' h)

Hoshino Cryptomeria

(*Cryptomeria japonica* Yoshino - 30'-40' h)

Non-Acceptable Evergreen Species

Austrian Pine

(*Pinus nigra* - 60'-70' h)

The Austrian Pine is unacceptable because it is succumbing to the fungus *Diplodia*.

Japanese Black Pine

Issues similar to Austrian Pines prohibit use of this evergreen species.

White Pine

(*Pinus strobus* - 80'-100' h)

White Pines lose all their lower branches in time and thus provide no screening, are overused in landscape plans and are subject to insect-fungus infestations which require annual maintenance.

Foundation Plantings & Shrubs

A variety of low-growing evergreen plantings shall be planted in front of all commercial, office and industrial buildings, churches, schools, other public institutions and the like. Foundation plantings should be located around all sides of a building which face a street or parking lot, within 5 feet of the building.

Foundation plantings shall include low-growing evergreen, shrubs and, if desired, ground covers.

Azalea

Azalea Hybrids (Azalea Blaauw's Pink (Kurume)

Azalea Delaware Valley White (Kurume)

Azalea Herbert (Gable)

Azalea Hino-Crimson (Obtusum)

Azalea Mother's Day (Kurume)

Azalea Stewartstonian (Gable)

Korean Azalea (*Azalea poukhanensis* - 3'-4' h)

Andromeda

Japanese Andromeda (*Pieris japonica* - 5'-6' h)

Cypress

Hinoki Cypress (*Chamaecyparis obtusa Gracilis*)

Golden Hinoki Cypress (*Chamaecyparis obtusa Crippsi* - 8'-10' h)

Dwarf Hinoki Cypress (*Chamaecyparis obtusa Gracilis nana* - 2-1/2'-4' h)

Dwarf Golden False Cypress (*Chamaecyparis pisifera filifera aurea nana* - 4'-5' h)

Holly

Compact Japanese Holly (*Ilex crenata compacta* - 4'-5' h)

Dwarf Japanese Holly (*Ilex crenata helleri* - 2'-3' h)
Hetz Holly (*Ilex crenata hetzi* - 4'-5' h)
Inkberry (*Ilex glabra* - 5'-6' h)
Compact Inkberry (*Ilex crenata compacta* - 3'-4' h)
Harvest Red Winterberry (*Ilex verticillata* Harvest Red - 6'-8' h)

Junipers

Hetz Blue Juniper (*Juniperus chinensis glauca hetzi* - 5'-7' h)
Compact Pfitzer Juniper (*Juniperus chinensis pfitzeriana compacta* - 3'-4' h)
Torulosa Juniper (*Juniperus chinensis Torulosa* - 10'-12' h)

Leatherleaf Mahonia

(*Mahonia bealei* - 6'-8' h)

Mountain Laurel

(*Kalmia latifolia* - 5'-6' h) (shaded area)

Mugho Pine

(*Pinus montana mughus* - 3'-4' h)

Rhododendron

P.J.M. Rhododendron (*Rhododendron P.J.M.* - 4'-5' h)
For sunny areas: any hybrid Rhododendron.
For shady areas: any native Rhododendron, such as:
Rhododendron Maximum (*Rhododendron Maximum*)

Spruce

Birdnest Spruce (*Picea excelsa nidiformis* - 2'-3' h)
Dwarf Alberta Spruce (*Picea glauca conica* - 4'-6' h)

Yew

Spreading English Yew (*Taxus baccata repandens* - 2'-3' h)
Dense Yew (*Taxus cuspidata densiformis* - 6'-8' h)
Dwarf Japanese Yew (*Taxus cuspidata nana [brevifolia]* - 4'-5' h)
Hatfield Yew (*Taxus media hatfieldi* - 8'-10' h)
Hicks yew (*Taxus media hicksi* - 8'-10' h)

Ground Covers

Junipers

Sargent Juniper (*Juniperus Chinensis sargentii* - 1-1/2"-2" h)

Bar Harbor Juniper (*Juniperus horizontalis* Bar Harbor - 6"-12" h)

Andorra Juniper (*Juniperus horizontalis plumosa* [*depressa plumosa*] - 1"-1-1/2" h)

Blue Rug Juniper (*Juniperus horizontalis wiltoni* - 3"-6" h)

Pachysandra

Japanese Spurge (*Pachysandra terminalis* - 6"-8" h)

Periwinkle or Myrtle

(*Vinca minor* - 6"-8" h)

Shademaster Brand Myrtle (*Vinca minor* Shademaster - 6"-8" h)

Other Recommended Ordinance Amendments

Revise Section 126-193A (Buffers) to read:

"The selection of suitable landscape buffers species is found in the Landscape Plan section of this ordinance."

Add definition to 126-278.02 (Definitions):

"Mature tree," is defined as any woody perennial plant of 5-inch caliper or greater (measured at one foot above the ground), or 3-1/2 inch caliper for coniferous trees.

Add new subsection to 126-191A (Landscaping) as follows:

Add to (A) The landscaping plan shall be incorporated into a site map showing the following:

- (1) scale and north arrow;
- (2) location of all existing and proposed buildings and improvements;
- (3) proposed grading changes;
- (4) location of all existing mature trees on the site, and the size and species of each. Site map must also show mature trees on adjacent lots, if those trees are within 10 feet of the property line between the two lots;
- (5) which trees will be removed; where replacement trees will be planted, and the size and species of each.

STORMWATER FACILITIES

LANDSCAPING

Landscaping is critical to improving both the function and appearance of stormwater best management practices. Chapter 7 of the New Jersey Stormwater Best Management Practices Manual provides landscaping criteria and plant selection guidance for effective stormwater systems. This guidance document for plant selection and layout design shall be made a requirement for landscaping in stormwater facilities and basins. Therefore, the Ordinance should be amended to add the following:

"Landscaping design for stormwater facilities shall utilize the plant selections and designs in accordance with New Jersey Stormwater Best Management Practices Manual, Chapter 7. Any departure from the species/designs identified in Chapter 7 will not be accepted unless there is a written request for such departure, which characterizes the unique circumstances that necessitate an alternate approach.

The Township reserves the right to select species from Chapter 7 that will require minimal maintenance and that will create minimal vegetative litter that might otherwise clog the drainageways and outlet structures."

MAINTENANCE AGREEMENTS

Amend Section 126-283 (Maintenance Agreements) to add the following:

Conservation Easement for Stormwater Facilities – Individual, Private Ownership or Homeowners' Association

The following shall be noted on the plat and applicable deeds:

Within the conservation easement area, the following terms and conditions shall apply, it being the intention that the conservation easement shall be preserved in its natural and existing state in perpetuity except as specifically noted herein:

- A. Property owners shall not change any features of the natural landscape or general topography of the conservation easement area nor remove any trees, shrubs, or other vegetation.
- B. No trees, shrubs or vegetation of any kind shall be removed or destroyed from within the easement area. No topsoil, rocks, minerals or other materials shall be excavated or removed from the conservation easement area, nor shall any fill or other material be deposited in the conservation easement area.
- C. No trash, yard waste or any other materials may be deposited within the conservation easement area. The conservation easement area shall not be used for the storage of materials.

- D. No signs, other than "Conservation Easement - No Trespassing" signs, shall be located on the conservation easement area.
- E. No building or other structures shall be located within the conservation easement area.
- F. No driveways or parking or storage of motor vehicles or equipment shall be allowed in the conservation easement area.
- G. No drainage of any wetland areas is permitted. The wetlands and transition areas are protected under the New Jersey Freshwater Wetlands Protection Act (N.J.S.A. 13: 9B-1 et. seq.)
- H. It is expressly acknowledged hereby that Bridgewater Township does not and will not in the future have any obligation to maintain any grass or other improvements in and about the said easement. Bridgewater Township does not now and will not in the future have any obligation to clean up debris or garbage in or about the easement. All maintenance shall be and shall remain the obligation of the owners of the land upon which the stormwater facilities are located, it being specifically intended that this easement shall run with the land and be binding upon all property owners and their successors and assigns.
- I. Bridgewater Township shall have the right, but not the duty, to enter upon the easement with vehicles and equipment, at any time and without prior notice to the property owner, in order to exercise its rights with respect to said easement. Bridgewater Township will replace and/or restore the grade of any property and any landscaping disturbed in connection with the exercise of its rights pursuant hereto. Upon completion of any work, Bridgewater Township shall remove, or shall cause to be removed, all materials, tools, equipment, building supplies and debris from the easement and surrounding areas.
- J. In the event that any property owner fails to properly maintain, inspect and/or repair any portion of the stormwater facilities within the easement area and continues to fail or refuse to do so after written notice from Bridgewater Township, Bridgewater Township shall have the right, but not the duty, seven (7) days after delivery of such notice, to enter upon the easement to perform any and all work determined by the Township in its sole discretion to be necessary to protect the public health, safety, and welfare and the costs thereof shall be paid by the property owner within thirty (30) days after submission of a statement thereof and, if not paid, such amounts shall become a municipal lien upon the property after certification to the taxing authority.

DRAINAGE EASEMENTS ON PRIVATE PROPERTY

The following restrictions shall be noted on the plat and deed:

- A. Bridgewater Township is given a continuous and perpetual right-of-way and easement through, over, upon, under, in, across, and along the described easement for one or more pipes, swales, ditches or other drainage facilities, and all necessary surface and subsurface appurtenances (collectively, the "facilities"). Bridgewater Township shall have the perpetual right to reconstruct, operate, maintain, inspect, protect and repair such stormwater facilities and all necessary surface and subsurface appurtenances within said easement, the perpetual right to do all that may be necessary for the reconstruction, replacement, extension, improvement, betterment, maintenance, inspection, protection, operation and use of such stormwater facilities and all necessary surface and subsurface appurtenances as a part of such stormwater facilities. Bridgewater Township shall have all reasonable incidental right to protect and preserve install lines and appurtenances such as the right to subjacent lateral support, the right to construct and maintain rip rap at places where such protection may be required to protect installed lines and appurtenances from erosion, the right to construct and maintain requisite surface and subsurface appurtenances. Bridgewater Township shall also have the right to take any reasonable action that may be necessary to protect installed stormwater facilities lines from infiltration.
- B. Bridgewater Township, its agents, representatives, employees or any person or entity designated by it shall also have the right, but not the duty, of entry and re-entry in and upon the land in the easement areas for the purpose of installing, constructing, and maintaining the related improvements as may be required by the Township of Bridgewater, County of Somerset, or State of New Jersey, or any agency thereof.
- C. No structure of any type other than the drainage facilities as shown on the plans approved by the Planning Board of Bridgewater Township shall be erected. Drainage facilities may not be altered in any way without prior written permission by Bridgewater Township.
- D. No topsoil, sand, gravel or material of any kind may be excavated or removed from within the limits of the easement unless approved by Bridgewater Township. No fill of any kind shall be permitted within the limits of the easement unless approved by Bridgewater Township.
- E. No trash, waste material or refuse of any kind shall be permitted within the limits of the easement. No storage of any materials shall be permitted within the limits of the easement.
- F. The owner of the property shall maintain the drainage easement by keeping vegetation in the manner necessary so that the stormwater has free flow through the entire drainage easement area.

DESIGN OF STORMWATER DETENTION FACILITIES

Modify section 126-282.S (Design of Stormwater Detention Facilities) to read as follows:

"Stormwater and sediment and erosion control facilities shall be designed in conformance with all Municipal Ordinances, the New Jersey State Standards for Stormwater management design and in conformance with the Standards for Soil Erosion and Sediment Control in New Jersey of the New Jersey State Soil Conservation Commission as approved by the Township Engineer or the Somerset-Union Soil Conservation District under agreement."

Add new Section 126-282.U (Design of Stormwater Detention Facilities) to read as follows:

"The Township shall have the right, but not the obligation, to provide repair or maintenance of any detention basin. The cost of such repair or maintenance shall be levied against the owner of the property."

The following should also be included:

"Design Standards shall be required to minimize the adverse impact of stormwater runoff on water quality, water quantity and the loss of groundwater recharge. The effect will reduce flooding, soil erosion, and nonpoint pollution, and will assure the adequacy of the existing infrastructure, maintain groundwater and the integrity of stream channels, their biological habitat, and protect the public health, safety and welfare.

The following standards shall govern the calculation of stormwater runoff quantity, quality and recharge:

- A. Residential Development projects are governed by the State Residential Improvement Standards (RSIS) as currently amended.
- B. Non-Residential Development Projects are governed by the NJDEP Stormwater Management Rules (NJAC 7:8).
- C. All Stormwater Management calculations shall be in accordance with the Township of Bridgewater Stormwater Management Plan.

Stormwater Management calculations must address reduction in quantity of runoff, increase stormwater quality by reducing total suspended solids (TSS) and increase infiltration to promote recharge of groundwater.

Infiltration shall be included in all designs where practicable to encourage recharge, as detailed in Stormwater Management Regulations (NJAC 7:8). Planning Area 1 and designated center properties are exempt from the infiltration requirement.

To minimize adverse impacts, non-structural stormwater management strategies are to be used to address stormwater quality and quantity issues, if possible. Only after these methods are investigated and proven to be unsatisfactory should structural methods be used.

Stormwater Management Facilities, detention basins, infiltration basins, recharge basins, wet ponds or constructed wetlands are considered structural methods and should only be used after all non-structural strategies.

The Township shall have Mitigation Plans to address existing stormwater management deficiencies, capacity problems and flooding. These mitigation plans are to be used if a development cannot meet the stormwater management standards."

RECOMMENDATIONS FOR OTHER ORDINANCE AMENDMENTS

CONSTRUCTION OF NEW DWELLING ON A LOT

The ordinance should be amended to allow a single family dwelling to be continued to be occupied while a new dwelling is being constructed on the lot and where the resulting dwelling will not violate any bulk provisions of the Ordinance. After a Certification of Occupancy is granted for the new dwelling, the original dwelling must be removed within 60 days.

As assurance of removal of the dwelling, the applicant shall post a bond of 8% of the assessed value of the house to be removed. Surety shall be in cash or 90 day letter of credit and shall be posted at the time the Certificate of Occupancy for the new dwelling is granted.

DECKS

It is recommended that the Ordinance be amended to state that decks without roofs, and with earth underneath the deck and serving residential structures, will not be computed in the maximum building coverage or maximum improved lot coverage; however, such decks must meet all setback requirements for the principal building, whether or not the deck is attached to the principal building.

In zones R-10A and R-10B, the setbacks for decks may be reduced to 10' from a rear property line.

LOT LINE ADJUSTMENTS

Lot line adjustments shall be reviewed by the Planning Board, with public notice required.

NEW AND USED VEHICLE SALES OR RENTALS

Amend the Ordinance to eliminate new or used vehicle sales or rentals in all zones within the Township.

NOTICE TO REGIONAL CENTER COMMUNITIES

The Ordinance should be amended to require notice to the Boroughs of Somerville and Raritan for major projects at least 30 days prior to the public hearing.

PARKING

Modify Section 126-169 (Parking) to add:

- | | |
|----------------|---|
| Livery Service | 2 spaces for each vehicle plus parking for other uses such as offices. |
| Banks | A maximum of 3 parking stalls per teller (20' long each) may be counted in drive-up aisles. |

PUBLIC WATER

It is recommended that a new provision be added to the Ordinance requiring that public water be provided for all new major subdivision and site plan applications that lie within the Regional Center. This will help ensure that existing well supplies are protected and that water is available for fire fighting purposes.

SIMPLE VARIANCE CHECKLIST

The checklist section of the ordinance should be amended to include a new checklist for residential uses which propose minor improvements, with variances.

A. Simple Residential Variance Option:

If the application requires a "c" variance, however, the application involves nothing more than:

- (1) The erection of a fence or shed on the property of a single or two-family residence, or
- (2) Construction of a swimming pool accessory to a single or two-family residence, or
- (3) Construction of an addition to or an alteration of a single or two-family residence, not exceeding 500 square feet

The applicant may submit a simple sketch of the property or a survey of the property showing clearly what is proposed and its relationship to existing structures. This shall include the requirements for minor subdivisions without need for steep wetlands delineations, hillside development computations, or stormwater management plans.

Even if this is a "simple" application, all of the above requirements (as well as all notice requirements) must be adhered to or the applicant's case cannot be heard by the Board.

TEMPORARY STRUCTURES

The Ordinance should be amended to permit the following temporary structures without Board review:

- A. Temporary quarters for residential structures destroyed by flood, fire, or similar events.
- B. Temporary structures for non-residential uses where a site plan approval has been granted, but circumstances require temporary quarters for some of the new functions approved as part of the

site plan. There are to be no health, safety, or welfare issues affecting the use of the temporary structure.

A construction permit will not be issued until receipt of written confirmation from the Engineer and Planner. The Engineer and Planner shall provide such confirmation only after receipt of written recommendation from the Zoning Officer. The temporary structure must be moved within one year.

UNDERGROUND UTILITIES

It is recommended that a new requirement be added to the code requiring that all utilities necessitated as part of a new major subdivision road or site plan application be located underground.

UTILITY SHEDS

The present ordinance does not consider a garden or utility shed, defined as having a height of 8 feet or less and a floor area of 100 square feet or less, as an accessory structure. The ordinance should be amended to include these structures as accessory structures.

The recommendation is that additional language be added to the definition of accessory use or structure that would provide a limit of not more than two garden or utility sheds or other structures containing less than 100 square feet of floor area for a residential property. Accessory structures should not be located in the front yard. It should also be clear in the ordinance that doghouses and children's play equipment would not be included as part of this restriction.

DEFINITION SECTION – 126-2

Temporary Structure

A definition of Temporary Structure shall be added to read as follows:

"A building or other structure (other than a construction trailer) which is intended for occupancy for a period not to exceed 12 months."

House of Worship (Churches)

House of Worship shall mean a building or group of buildings, including customary accessory buildings, designed or intended for organized public worship. For the purpose of this Chapter, the term shall include chapels, congregations, cathedrals, temples or similar designations.

Senior Citizen Housing

Amend Section 126-2 (Definitions) – Definition of Senior Citizen Housing such that the requirements of the resident should be changed from "At least 62 years of age" to read:

"at least 55 years of age and no resident shall be less than 19 years of age."

Building Height

Amend Section 126-2 (Definitions) by replacing the definition of building height to read as follows:

"Building Height" shall mean the average grade computed at the four (4) corners of a principal structure or the four (4) most extreme point on the north, south, east and west sides of a principal structure, or at four (4) points ninety (90) degrees apart for a circular structure, as measured to the highest peak of the roof on said structure. This calculation shall not include chimneys, spires, towers, elevator penthouses, tanks, antennas, air-conditioning equipment and similar projections; such projections shall not cover more than five percent (5%) of the roof area. In the case of antennas, air conditioning equipment and tanks, they shall be shielded from view."

Flag Lot

Delete this definition from the Ordinance.

Lot Width

Amend the definition of Lot Width to read as follows:

"Lot Width – The shortest distance between the side lot lines, measured parallel to the front lot line at the minimum front yard setback line and street right-of-way line."

Floor Area

FLOOR AREA shall be revised to read, "The sum of the gross horizontal areas of the several floors of a building, measured from the exterior walls of the building. "Floor area" shall not include areas devoted to mechanical equipment serving the building, areas devoted exclusively to off-street parking, including garages and loading spaces for motor vehicles, nor any space where the floor to ceiling height shall be less than seven feet."

Percent Building Coverage

PERCENT BUILDING COVERAGE shall read as follows, "The building coverage in square feet divided by the area of the lot in square feet, multiplied by 100."

Minor Site Plan

The definition of Minor Site Plan found in Section 126-2 (Definitions) shall be revised to read:

- "A. Has an approved site plan that has been granted previously.
- B. Involves no more than 1,000 square feet expansion to an existing structure.
- C. Does not require additional parking improvements pursuant to 126-169 (Off Street Parking Requirements for Particular Uses)."
- D. Does not involve a planned development.
- E. Conforms to the requirements of Minor Site Plan, as found in NJSA 40:55D-5 (MLUL).

Improved/Impervious Lot Coverage:

There is some question as to what must be counted in calculating improved/impervious lot coverage. The ordinance should be made clear as to how to calculate coverage and also to confirm that the terms "improved lot coverage" and "impervious lot coverage" are the same. The maximum improved lot coverage listed in the area, yard and bulk schedule includes all improvements that are more impervious than the natural surface. In addition to the definition found in Section 126-2 (Definitions), there is also a discussion of Improved Lot Coverage within Section 126-329 A, B, and C (Improved Lot Coverage) that needs modification.

The definition of "improved lot coverage" found in Section 126-2 (Definitions) should be amended to state that all building, gravel and/or other stone surfaces used for parking, driveway, or walkway shall not be counted as improved lot coverage. Stone patios shall be computed as part of the overall lot coverage. Decks and landscaping/decorative stone areas shall not be included in the determination of lot coverage. Swimming pools as measured from interior wall to interior wall shall not be counted toward improved lot coverage, nor shall children's play equipment.

Lot Corner

Corner lots shall have at least two front yards and one rear yard. The rear yard will be opposite the narrower lot width. The lot widths for each individual frontage shall all conform to the minimum lot width requirement for the zone.

APPLICATION/ESCROW FEES

Amend Section 126-35 – (Fees) (Section 2 – Escrow Deposits) to read:

"If the fee schedule for application fees or escrow deposits is modified during the course of an application, the new application and escrow fee due and payable will be that fee which is in effect at the time of decision by the Board."

NOTICE – MASTER PLANS AND APPLICATIONS FOR DEVELOPMENT

It is the policy of the Township to afford residents the greatest level of information and opportunity for input for developments within the Township. The following is recommended:

Amend Section 126-47 (Notice Required) to read:

"Notice of hearing shall be given by the Planning Board as to the proposed adoption, amendment or revision of the Master Plan or Re-examination Report. Notice of hearing shall also be given by the applicant for applications for development at least ten (10) days prior to the date of the hearing. Notice shall be required for all development pursuant to N.J.S.A. 40:55D-1 et seq. and for all site plans, minor subdivisions, major subdivisions, all variances, special permits and interpretations. Notice for hearings shall not be required for final site plan or final subdivision applications."

CONTENTS

Amend Section 126-142B (Contents) to read:

"Public notice of applications shall be required for all site plans."

PRELIMINARY APPROVAL

A new provision should be added as new subsection 126-142.C (Preliminary Approval) to read as follows for major site plan applications:

"C. The Board shall consider requiring a Developer's Agreement as part of an approval for those applications that include increased municipal obligations for such improvements as new roadways, stormwater basins or other facilities that may require direct municipal involvement."

LIGHTING OF FACILITIES AFTER BUSINESS HOURS

Add the following text to 126-160 (Lighting):

"Lighting within the parking areas and within all commercial buildings shall be extinguished at the close of business when employees are no longer in the building. Security lighting may continue to operate; however, the identification, specific location and intensity of the security lighting shall be identified at the time of site plan approval."

SIGNS

Modify Section 126-162 (Signs) to add new sections D and E:

- D. Vehicles bearing the name of the establishment and parked in an area that can be viewed from the right-of-way shall be considered a sign if the vehicle remains in such visible location more than 8 hours in a 24-hour period.
- E. Permanent signs with telephone numbers posted on the sign are not permitted.

Amend Section 126-195.F (Signs) to add new subsection 17 to read:

"Only one neon sign per tenant is permitted."

OUTSIDE STORAGE

Add the following language to new Section 126-165.1:

"Unless identified and delineated on a site plan approved by the Board, no outside storage is permitted on properties."

DRIVE-THRU RESTAURANTS

Amend Section 126-169 (Restaurants, Eating & Drinking Establishments and Catering Halls) to require:

"1 parking space per 2 ½ seats. Drive-thru restaurants are prohibited."

LANDSCAPING

Add new section 126-191.C (Landscaping) to read as follows:

"Any development plan that is submitted to the Planning Board or Zoning Board of adjustment for application related to a subdivision or other application for development for a single-family or two-family use shall be required to replace trees that are greater than 8 inches dbh if non-deciduous,

12 inches dbh if deciduous, or 4" dogwoods. Replacement trees will be selected from the deciduous and non-deciduous listing for trees as found in Section 126-191.C (Landscaping). The caliper of such replacement trees shall be 2 ½ inch caliper for non-deciduous trees and 1 ½ inch caliper for deciduous trees. In the event that the developer and the Municipal Planner or Environmental Officer concur that not all the trees will fit properly on the site, the developer shall be required to plant the remaining required trees on municipally owned property. The specific site and location shall be in accordance with written instructions from the Township. This replanting is in addition to street trees that may be required along the right of way of the development."

SOLID WASTE ENCLOSURES

Amend section 126-196 (Utilities) to add a new section to read as follows:

- C. "Solid waste enclosures and recycling enclosures shall be carefully oriented on the site, and must be constructed with the same construction materials of the principal structures that they serve."

PLANNING BOARD ACTION

A new provision should be added as new subsection 126-223.C (Planning Board Action) to read as follows for major subdivision applications:

- "C. The Board shall consider requiring a Developer's Agreement as part of an approval for those applications that include increased municipal obligations for such improvements as new roadways, stormwater basins or other facilities that may require direct municipal involvement."

ENDORSEMENTS

Add the requirement for an Approval Block for the signatures of the Board Chairman, Secretary and Engineer in Section 126-236 (Preliminary Plat) as new subsection 126-236.T (Preliminary Plat) and to Section 126-153 (Required Information) as new subsection 153.0(7).

WIDENING STREETS

Section 126-240A (Widening Existing Streets) should be amended to include site plans in the text:

- "Where subdivisions and site plans include existing streets which do not conform..."

"If the subdivision or site plan adjoins one (1) ..."

MITIGATION MEASURES

Currently, all construction mitigation measures are not required to be placed on plans. It is recommended that Section 126-243.1 (Construction Mitigation Measures), subsections A through O be required to be placed on all major subdivision and site plans.

HILLSIDE DEVELOPMENT

Bridgewater Township's Land Use Code includes a Hillside Development section, (126-266 (Density Computations)) that establishes lot area reductions utilizing a sliding scale that is applied based on the intensity of the slope. Section 126-266 (Density Computations) of the code should be amended by incorporating the following language in place of the existing regulation.

"All F.A.R. and other density calculations shall be based on the gross area of the property; however, no development or improvements shall be permitted on slopes of 30 percent or higher."

The following text should replace the first sentence of Section 126-266A(1) (Density Computations) to read:

"The maximum F.A.R. modification shall be determined by multiplying the total land area in various slope categories by the following factors:"

Add to Section 126-266 (Density Computations)

"Development shall be permitted on the lesser slope area and not on areas of greater slopes."

EXEMPTIONS

Amend Section 126-278.4.E (Exemptions) to read as follows:

"Trees that are removed as part of a project subject to the Planning Board/Board of Adjustment subdivision or site plan approval; however, re-planting will be required pursuant to Section applicable Ordinance provisions."

PUBLIC SAFETY PROVISION

In order to provide for public safety in a floodplain during periods of flood, it is recommended that Section 126-295 (Burden of Proof) be modified to add: Access to habitable structures shall not be inundated during time of flooding.

NUMBER OF BUILDINGS LIMITED

Amend section 126-330 (Number of Buildings Limited). The first sentence should read:

"There shall be no more than one (1) principal structure on any lot in any single family zone."

MINIMUM BUFFER/CONSERVATION EASEMENT DISTANCE REQUIREMENTS

Modify Section 126-332 (Minimum Buffer/Conservation Easement Distance Requirements) of the zoning code to add a minimum buffer of 25 feet for all recreational uses abutting a residential zone.

FENCE REQUIREMENTS

Revise Section 126-339D (Requirements for Accessory Uses) to read:

"D. Fences. Fences where at least fifty percent of the board width that remains open shall not be considered structures and shall be allowed along lot lines."

CONVERSION OF SINGLE-FAMILY DETACHED DWELLINGS

Section 126-344 (Conversion of Single-Family Detached Dwellings) should be deleted in its entirety.

VILLAGE HOMES

Amend Section 126-348 (Village Homes) to delete the following sentence from the first paragraph:

"The conversion of single-family detached dwellings to two-family dwellings shall be considered a conditional use in the R-20.1 Single Family Affordable Residential Zone."

Amend Section 126-348.A (Village Homes) to read:

"The development of lots of less than 20,000 square feet shall be permitted in this zone provided that 11% of the units developed are set aside for affordable housing or \$4,375.00 per market unit is contributed to an affordable housing fund. The development of affordable housing pursuant to the above, shall be dispersed throughout the entire development tract, and shall not be permitted to be developed as an isolated or separated component of the development plan."

Amend Section 126-348 (Village Homes) to add new subsection 126-348.B(14) to read:

"Minimum tract size: three (3) acres"

Amend Section 126-348.B(11) (Village Homes) to read:

"Maximum Impervious Coverage: forty percent (40%)"

Amend Section 126-348.B(5) (Village Homes) to read:

"Minimum front yard: twenty (20) feet"

CLUSTER DEVELOPMENTS

Amend Section 126-349 (Cluster Development) to add a new subsection E as follows:

- E. A lot created by cluster subdivision will be permitted to have its impervious coverage calculated based upon its proportionate share of dedicated open space in the subdivision.

The reduced lot size established in the cluster subdivision is grandfathered as to lot size.

CHILD CARE CENTERS

The Municipal Land Use Law allows child care centers as a permitted use in all non-residential zones. This is confirmed in Section 126-351.1 (Child Care Centers) of the Land Use Ordinance. To ensure consistency with the MLUL, child care centers that are "licensed by the Department of Human Services" shall be listed as a principal permitted use in all of the Township's non-residential zoning districts. Additionally, those zones that list child care centers as a conditional use should be amended to delete this reference.

Due to the procedural requirements of the State Ordinance, Section 126-352.2 (B6) (Accessory Retail Uses and Child-Care Centers) should be eliminated. Also, Section 126-352.2 (B5) (Accessory Retail Uses and Child-Care Centers) is not necessary and therefore should also be eliminated from the Ordinance.

HOUSES OF WORSHIP

Modify Section 126-353B (Houses of Worship) to read as follows:

"B. Minimum lot area.

(1) The minimum lot area for houses of worship shall be as follows:

Zone	Minimum Site Area Per Square Foot of Floor Area of All Buildings (square feet)	Maximum Coverage of All Impervious Surfaces (percent)
R-50	20	25
R-40	15	25
R-20	10	40
R-10	8	50

(2) In all residential zones, the requirements for the R-50 Zone noted above shall govern, except that no lot shall be less than the minimum required in any zone. In all non-residential zones, the requirements of the R-50 zone noted above shall govern except that the maximum percent of lot coverage shall be the same as that permitted in the zone on which the lot is located.

(3) In addition to parking regulations for Houses of Worship, all buildings, or portions thereof, which are used for purposes other than those specific for worship shall have parking requirements computed based on the areas devoted to such uses."

Amend Section 126-353 (Houses of Worship) to amend Section 'C' to read as follows:

"C. Minimum yards. The minimum yards for the lot where the House of Worship is proposed to be located shall be maintained, except that when said lot abuts a residential zone or use, the minimum side and rear yards shall be doubled."

Amend Section 126-353 (Houses of Worship) to add new Sections D and E to read as follows:

"D. In addition to the requirements of B above, additional lot area for residential uses shall be required as follows:

10,000 square feet additional lot area for each dwelling unit or 10,000 square feet additional lot area for each 4 bedrooms, whichever is greater.

- E. There shall be no parking proposed in the minimum setback for a principal building as established in Section 126-376 (Schedule of Area, Yard, and Building Requirements) for the applicable zone."

SCHEDULE OF AREA, YARD AND BUILDING REQUIREMENTS

Designate the existing Schedule of Area, Yard, and Building Requirements found in Section 126-375 (Violations and Penalties) as new Section 126-376 (Schedule of Area, Yard, and Building Requirements).

WIRELESS TELECOMMUNICATIONS EQUIPMENT AND FACILITIES

PURPOSE

The purpose of this section is to recommend that the Township regulate the location and placement of wireless telecommunications structures, antennas and equipment within the Township of Bridgewater. It is also the purpose of this section to recognize that the installation of new towers to support such antennas has a negative impact on the scenic and quiet character of the countryside which Bridgewater Township seeks to protect. This section seeks to meet the mandate of the Telecommunications Act of 1996, while at the same time limiting the proliferation of wireless telecommunications towers.

PERMITTED USE/CONDITIONAL USE TREATMENT

The installation of wireless telecommunications antennas on existing structures, subject to minor site plan approval, shall be a permitted use or a conditional use pursuant to permitted or conditional uses cited below.

Zone	Equipment	Location	Permitted (P) Conditional (C)
Non-Residential	Antenna	No Collocation on existing site	C
	*Antenna	With Collocation on existing site	P
	Tower	New site	C
Residential	*Antenna	With Collocation on existing site	P
	Tower	New site	C

* Assumes that the existing structure will not require an increase in height and also that the entire facility will not result in greater height than is in the existing condition. If greater height results, the application must meet the standards of a conditional use.

- A. For all wireless telecommunication facilities, when a location out of public view is not possible, a landscape buffer of twenty-five (25) feet in width shall be provided outside the fence around the wireless telecommunications equipment compound, to shield the facility from public view.

Landscaping shall include native evergreen and deciduous trees at least eight (8) feet high at the time of planting, and the number of trees shall be based on the equivalent of staggered double rows at ten (10) feet on center.

CONDITIONAL USE STANDARDS FOR THE LOCATION OF WIRELESS TELECOMMUNICATIONS ANTENNAS OR TOWERS

A. An applicant desiring to construct wireless telecommunications antennas or towers in any zone shall provide a sufficient showing so as to:

(1) Present documentary evidence regarding the need for wireless telecommunications antennas at the proposed location. This information shall identify the wireless network layout and coverage areas to demonstrate the need for new equipment at a specific location within the Township.

(a) Provide documentation as to what other sites were studied and the reasons they were found unsuitable.

(b) Provide documentation as to alternate "types/styles" of antennas that are possible and specify why this type was chosen. Include characteristics such as color, texture, design, etc.

(2) Provide documentary evidence that a good faith attempt has been made to locate the antennas on existing buildings or structures within the applicant's search area. Efforts to secure such locations shall be documented through correspondence by or between the wireless telecommunications provider and the property owner of the existing buildings or structures.

(a) FCC licensed wireless telecommunications providers are encouraged to construct and site their facilities with a view toward sharing facilities with other utilities, collocating with other existing wireless facilities and accommodating the collocation of other future facilities where technically, practically, and economically feasible.

(b) An FCC licensed wireless telecommunications provider proposing a new wireless telecommunications facility shall demonstrate that it has made a reasonable attempt to find a collocation site acceptable to radio frequency engineering standards and that none was feasible. Evidence demonstrating that no existing wireless telecommunications

tower or building or structure can accommodate the provider's proposed antenna shall consist of any one or more of the following:

- [1] No existing towers or structures are located within the geographic area that is necessary to meet the provider's radio frequency engineering requirements to provide reliable coverage.
- [2] Existing towers or structures are not of sufficient height and cannot be made to be of sufficient height to meet the provider's radio frequency engineering requirements, or do not have sufficient structural strength to support the provider's proposed antenna and related equipment.
- [3] The provider's proposed antenna would cause electromagnetic interference with the antenna on the existing towers or structures or the antenna on the existing towers or structures would cause interference with the provider's proposed antenna.
- [4] Costs exceeding new tower development are unreasonable.
- [5] The provider demonstrates that there are unique limiting factors that render existing towers and structures unsuitable.

(3) Document the locations of all existing communications towers within the applicant's search area and provide competent testimony by a radio frequency engineer regarding the suitability of potential locations in light of the design of the wireless telecommunications network. Where a suitable location on an existing tower is found to exist, but an applicant is unable to secure an agreement to collocate its equipment on such tower, the applicant shall provide sufficient and credible written evidence of its specific attempts to collocate.

(4) Comply with the Township standard that no wireless telecommunications towers shall be permitted which would require lighting affixed thereto unless the lighting is required under FCC, FAA or any other governmental agency regulations or requirements.

B. An applicant desiring to construct a wireless telecommunications tower shall also satisfy the following bulk standards, which bulk standards shall be interpreted and reviewed pursuant to N.J.S.A. 40:55D-70(c):

- | | |
|--|---|
| (1) Minimum lot size | As required by the zone in which located |
| (2) Minimum setback of wireless telecommunications tower from: | |
| (a) Any property line | The zone setback requirements or the tower height, whichever is greater (fall zone) |
| (b) Any existing residence | 500' |
| (c) Any wireless telecommunications tower | 2,640' |
| (3) Minimum setback for equipment compound from any property line | The zone district setback requirements for a principal structure |
| (4) Maximum height of wireless telecommunications tower is 140 feet (which shall include the height of the antennas) | |
| (5) Maximum height of antenna attached to a building | 10' beyond the edge of the building on which it is attached |

C. The applicant must state in writing that the new tower can accommodate future collocation and the number of antennae. The applicant shall state if he is willing to leave excess space at a compensation which is determined to be reasonable under prevailing market rates and conditions. The letter setting forth the commitment shall commit the owner and successors in interest and shall be filed in the Somerset County Clerk's Office in a form acceptable to the Board Attorney.

SITE PLAN APPLICATION REQUIREMENTS FOR THE INSTALLATION OF WIRELESS TELECOMMUNICATIONS TOWERS IN ADDITION TO CHECKLIST REQUIREMENTS FOR MINOR SITE PLANS

A. Information shall be provided to include the site boundaries; tower location; existing and proposed structures, including accessory structures; existing and proposed ground-mounted equipment; vehicular parking and access; and uses, structures, and land use designations on the site and abutting parcels.

- B. A landscape plan drawn to scale showing proposed specific landscaping treatment, including species type, size, spacing, other landscape features, and existing vegetation to be retained, removed or replaced.
- C. An Environmental Impact Study.
- D. A report from a qualified expert certifying that the wireless telecommunications tower and equipment facility comply with the latest structural and wind loading requirements as set forth in the Building Officials and Code Administrators (BOCA) International, Inc. Code, including a description of the number and type of antennas it is designed to accommodate.
- E. Elevations of the proposed tower and accessory building generally depicting all proposed antennas, platforms, finish materials, and all other accessory equipment.
- F. A copy of the lease (with confidential or proprietary information redacted) or deed for the property.
- G. The wireless telecommunications tower shall be designed and constructed so as to accommodate at least three (3) antenna arrays of separate telecommunication providers.
- H. The tower will be located on the site to assure that the fall zone does not extend beyond the property lines.
- I. The owner of the property shall acknowledge responsibility for removal of the telecommunications equipment in the event that there is a discontinued usage for a period of 18 months. This shall be binding on the owner and successors.

ANTENNA MODIFICATIONS

- A. Whenever the array of antennas is proposed or modified, operators of wireless telecommunications facilities shall provide to Bridgewater Township a report from a qualified expert certifying that a wireless telecommunications tower or building or other support structure as modified complies with the latest structural and wind loading requirements as set forth in the Building Officials and Code Administrators (BOCA) International, Inc. Code.
- B. Operators of wireless telecommunications facilities shall notify Bridgewater Township when the use of such antennas and equipment is discontinued. Facilities that are not in use for wireless telecommunications purposes for eighteen (18) months shall be removed by the provider at its cost. This removal shall occur within one hundred twenty (120) days of the end of such eighteen

(18) month period. Upon removal, the site shall be cleared, restored, and re-vegetated to blend with the existing surrounding vegetation at the time of abandonment.

- C. Proposed or modified antennas or proposed tower installations require site plan approval and may also require or use variance approval, as applicable.

APPLICATION AND ESCROW FEES FOR WIRELESS TELECOMMUNICATIONS INSTALLATIONS

Site plan application fees and escrows for wireless telecommunications installations shall be submitted with the application as set forth in the Ordinance for site plans and conditional uses, as applicable.

CIRCULATION PLAN ELEMENT

INTRODUCTION

The Township of Bridgewater is in the central portion of Somerset County. Bridgewater's appeal in central New Jersey is in its diversity – beautiful countryside, quiet neighborhoods, sophisticated retail districts and modern office buildings. Most of the new non-residential developments have been along highway corridors that generally are supported primarily by the motor vehicle.

It should be emphasized that the Circulation Plan is not intended to be a static document that is fixed for any particular time period; instead, it is subject to modification and refinement as additional information becomes available or circumstances change. Further, the Circulation Plan is a planning document; therefore, the exact engineering design for the proposed improvements to existing and future roadways and intersections are subject to site specific characteristics and restrictions that are beyond the scope of this report and will be determined at the time the particular improvement is to be designed.

Please note: This circulation element recommends and promotes many of the transportation policies from the State Development and Redevelopment Plan (SDRP). The SDRP can be accessed on the internet at the following address:

<http://www.state.nj.us/dca/osg/docs/stateplan030101.pdf>.

In the state plan, statewide policy “#8 Transportation” states: “Improve transportation systems by coordinating transportation and land use planning; integrating transportation systems; developing and enhancing alternative modes of transportation; improving management structures and techniques; and utilizing transportation as an economic development tool.” The statewide policy is further broken down into 23 sub-policies. See the SDRP for further information on these policies.

TOWNSHIP VISION

The Township of Bridgewater will successfully manage growth and maintain the quality and uniqueness of the Township. Its aim is that citizens will feel safe to walk to commercial uses, schools

and their neighbor's homes. Bicycling along the Raritan River and along its streets will be safe and commonplace. Developments of office parks and retail will be walkable and served by mass transit. Trucks will be using the appropriate roadway and not going through residential areas. Speeding of cars through high pedestrian areas will be unusual. Frequent mass transit service will be common. Better access to the rest of the Regional Center will be realized.

FOCUS AREAS

The following three focus planning areas are discussed in the Circulation Plan section to stress the importance of the land use transportation connection. These include the Bridgewater Core Area, East Gateway and West Gateway sites. The discussion of the focus areas from a transportation perspective is critical to the overall planning for these areas.

Core Area

The core area of Bridgewater encompasses a diverse range of land uses and transportation infrastructure. The core includes large new office buildings, a regional mall, a hotel, retail commercial, senior citizen housing, a post office, a library and other civic uses. Typically, this would be a good start to create a dynamic area. Unfortunately, this area is primarily designed for access from the automobile. It is served by a bus route and has some pockets of pedestrian activity.

Existing Conditions:

- A. Traffic congestion in and through this area is a problem and growing.
- B. Infill development in this area would be difficult to accomplish considering the levels of traffic that it is already experiencing.
- C. Most buildings/uses are not within reasonable walking distances.
- D. The sidewalk environment is not inviting.

Recommendations – General:

The following is a list of recommendations for the Bridgewater Core Area:

- A. Recognize the proximity of the public and parochial high schools that surround the area when planning improved pedestrian and bicycle access to and throughout the core.
- B. Improve the pedestrian environment on bridges across the major highways in the core area along Route 202-206, Route 287 & Route 22.
- C. Link this core area to the downtowns of Raritan and Somerville by a shuttle, sidewalks and bike paths.

Recommendations – Zoning Amendments:

For subdivisions and site plans, require development contribution for the construction of bike paths and sidewalks for facilitating development in the Bridgewater Center and provisions for shuttle in the Bridgewater Core.

East Gateway Site

This area acts as one of the eastern gateways into the Regional Center. This area has been seen as a possible redevelopment area that could be served by a form of mass transit. The Chimney Rock Road/Route 22 area is suitable for designs particularly focused on sound planning design due to its proximity to major transportation corridors.

Existing Conditions:

- A. Heavy traffic volumes along Route 22.
- B. Chimney Rock north of this area has many curves and could act as detriment for access to and from the Village of Martinsville.
- C. A rail right of way currently exists through this area and connects to an active freight line to the south.
- D. This area has good access to Route 22, Route 287 and Route 202-206.

Recommendations:

The following is a list of recommendations for the East Gateway site:

- A. All new and infill developments in this area should be designed to incorporate the principals of transit oriented development. This would allow for either Bus Rapid Transit (BRT) or light rail.
- B. Existing buildings and areas should be retrofitted to make it easier to walk or ride a bicycle. This could be a long term strategy that results in an area that is friendly to any form of mass transit.
- C. Implement access management techniques along the Route 22 corridor such as combining driveways and minimizing any new access points.
- D. Encourage sidewalks along the suburban boulevard plan of the highway.
- E. Encourages cross-easements for access between projects.

West Gateway Sites

Existing Conditions:

- A. Route 202 through this area has high volumes of traffic.
- B. West of this area is the Township of Branchburg. South and west of this area has been experiencing high growth rates. This has resulted in higher volumes of traffic along Route 202.
- C. This area of Route 202 is a mix of corporate headquarters uses and retail uses.

Recommendations:

The following is a list of recommendations for the West Gateway site:

- A. Implement access management techniques along the Route 202 corridor such as combining driveways and minimizing any new access points.
- B. Provide sidewalks along Route 202, where appropriate.

GENERAL FOCUS AREAS

There are seven roadway circulation-related focus areas within the Township of Bridgewater. They are the following:

- A. Milltown/Vanderveer Road
- B. Bridgewater Train Station

- C. Route 28
- D. Route 22
- E. Route 202-206
- F. Washington Valley Road
- G. Identified Local Roads

Milltown/Vanderveer Road

This area of the regional center is bordered to the north by Route 28 and Route 22, to the south by Route 202 and to the west by the North Branch of the Raritan River and the Raritan Valley train line. This area in the western portion of the Regional Center has a large number of residential units with a mix of townhouses, condominiums and single-family homes. Considering the amount of housing that has been constructed in this area in the past 15 years, there have been few commercial areas built within a realistic walking distance or convenient bikeway facilities. The mixture of the density of homes and the lack of convenience stores has resulted in many more trips to be performed by automobile than what one could reasonably expect. The main access points are few and are auto oriented.

Recommendations:

The following is a list of recommendations for Milltown/Vanderveer Road:

- A. This area needs to improve its bicycle connections to the few adjoining commercial areas in order to restore a balance to the circulation system.
- B. The railroad bridge over Milltown Road should be studied to determine if it should be widened to include sidewalks and enough room for bicyclists to share the road with motor vehicles. Any improvements should discourage truck traffic from using Milltown Road between Route 202 and Route 22.

Bridgewater Train Station

The Bridgewater Train Station (formerly known as Calco) is located on the southeastern edge of the Regional Center. This station is a part of the Raritan Valley Line and has service from High

Bridge to the west to Newark to the east. In the past six years this station has witnessed an upgrade in its waiting area and a general improvement of the land uses in the abutting areas.

Recommendations:

The following is a list of recommendations for the Bridgewater Train Station:

- A. This area needs to continue to focus on its pedestrian connections to its adjoining land uses and to focus its use as a major-events train station stop and park-n-ride.

Route 28

The Route 28 corridor is an east-west corridor that runs parallel to Route 22 through Bridgewater Township and its adjoining municipalities. The corridor has both residential and commercial land uses along its length. In addition, there are three schools along this corridor. As Bridgewater and the local region have grown, traffic and congestion have increased on this roadway. This increase has resulted in access issues for residents, concerns about maintaining the residential character of neighborhoods while providing adequate access for vehicles according to the functional classification of the roadway, and concerns with bicycle and pedestrian safety along the corridor.

Recommendations:

The following is a list of recommendations for the Route 28 corridor:

- A. Review and consider implementation of improvements as outlined in the findings from the "Route 28 Needs Assessment."
- B. Provide a complete, separated bicycle and pedestrian network along and across the route length.

Route 22

The Route 22 corridor through Bridgewater acts as a boundary of the northern portion of the community to the remainder of the regional center. The area of this corridor from Route 202-206 east provides a large grassed and landscaped median that has a variety of commercial land uses. A long-range plan for this area is known as the "Suburban Boulevard" concept. The latter

goal is to ease existing traffic and increase safety. This corridor's land use is integrally linked to the opportunities and constraints of the transportation issues found here. This corridor is also critical to not just in an east west direction but as a corridor to be crossed from the south to the north. This corridor has few grade-separated crossings and hence acts as a large boundary between the northern portions of the regional center to the southern portion. The few grade-separated crossings also serve to create some of the most egregious bottlenecks in the regional center for traffic congestion.

Recommendations:

The following is a list of recommendations for Route 22:

- A. Where safe and practical, available grade-separated and grade crossings should be bicycle and pedestrian friendly when incorporated into the subdivision boulevard.
- B. The goal of the Suburban Boulevard is to improve the access management failings of the corridor in order to improve safety and to separate the local from the regional traffic. Access management policies should be implemented along this corridor as both a short and long-term strategy.
- C. At grade railroad crossings should be eliminated.
- D. Land uses in the median are a constant safety hazard for both the customers of these uses and the regional traveling public. These uses and their access points need immediate attention.

Route 202-206

Route 202-206 are major highway corridors in Bridgewater Township. Route 202-206 is a combined route in the northern part of the Township. When 202-206 enters Raritan Borough, Route 202 branches to the west while 206 continues south. Development trends have brought increased traffic volumes and an increase in congestion during peak periods on this highway. This increase in growth combined with a mix of commercial, corporate, residential and office land uses have made Route 202-206 a highly traveled corridor. Issues associated with these corridors are spillover and cut-through traffic onto local roadways, access issues with local cross streets and driveways, and congestion during peak hours.

Recommendations:

The following is a list of recommendations for Route 202-206:

- A. Consider traffic calming treatments like enhanced crosswalks and curb extensions on local roads connecting to the highway.
- B. Perform an access management study along the full length of the corridor in order to maximize safety and capacity.
- C. Re-examine and update the 1983 study produced by Orth-Rogers, and implement those recommendations that are still feasible and warranted.

Washington Valley Road

Washington Valley Road is an east-west road that acts as an important connector between Warren Township, the Village of Martinsville and Bridgewater Township. The land uses adjacent to the roadway are mostly residential with the exception of Martinsville which has a mix of uses. This roadway also provides connection to roadways like Mt. Horeb Road, which provide connection to Route 78. This roadway has seen increased volumes associated with growth in the region.

Recommendations

The following is a list of recommendations for Washington Valley Road:

- A. Study the corridor for bicycle and pedestrian facility gaps and provide connections.
- B. Improve the shoulders along this corridor to provide safer travel for all modes of transportation.
- C. Initiate a study for the Village of Martinsville to determine “village scale” improvements, parking, and shared bicycle and pedestrian needs.

Identified Local Roads

Bridgewater Township has local roads that have been identified as a focus area as a group. As development and growth has increased in the region many local roads have seen an increase in traffic volume. The following roadways have been identified as needing further study to determine the affect of increased volumes on these roads, their adjoining neighborhoods, and the

community at large: Brown Road; Main Street; Adamsville Road; Vanderveer Road; Foothill Road; Meadow Road; Pearl Street/Kline Place; Milltown Road; Country Club Road.

Recommendations

The following is a list of recommendations for those identified local roads:

- A. The Township should monitor the aforementioned roadways to determine the extent of through traffic increases.
- B. Traffic calming measures should be evaluated for applicability to issues identified on problem roadways.

ROADWAYS

Existing System

The system of roadways within a municipality is a significant part of the land use planning process, since it is the roadway network that provides people with their most basic way to get around. Bridgewater Township is very dependent upon the automobile.

JURISDICTION OF ROADS

Federal, State, County and Town jurisdiction of roads lie within Bridgewater Township. Generally speaking, the volume and the function that a road performs are revealed by the political jurisdiction that has control of its design and maintenance.

There are over to 230 miles of public roads in Bridgewater Township. The bulk of these consists of municipal roads (over 80%), followed by state and federal roadways (nearly 12%), then roads under county jurisdiction (almost 9%). The State of New Jersey, through the New Jersey Department of Transportation, is responsible for maintaining all federal and state highways.

Interstate 287 runs through the northern portion of the Somerset Regional Center, beginning to veer north as it leaves the center. State Route 22 runs east-west throughout the length of the center and acts as a connector to all of the major routes in the Center. State Highway 202-206 is found in the central portion of the Township that is within the Center and runs mostly north-south through the

Township. Route 202 does run southwesterly as it leaves the Regional Center. State Highway 28 is mostly southeasterly, starting in the northwestern part of the township and running into Somerville Borough.

FUNCTIONAL CLASSIFICATIONS OF ROADWAYS

Each of the various roads in the Bridgewater Township is called upon to perform a different type of function in the overall transportation network. For planning purposes, roads are generally classified into three major types: arterial, collector, or local. Each of these types defines a certain range of function.

Arterial Roads

Vehicular rights-of-way whose primary function is to carry traffic in a continuous route across or through an area. Arterials are typically a principal part of the road network for through traffic flow, taking traffic from collector streets that serve neighborhoods and connecting to freeways, expressways, and/or parkways. Arterial roads also may be broken down into principal and minor arterials. Principal arterials are those interstate and major highways that form an interconnected network of continuous routes serving regional corridors having the highest traffic volumes and the longest trip lengths. Minor arterials interconnect with and augment the principal arterial system.

Collector Roads

These are the roads that carry traffic between arterials and local streets and provide access to abutting properties. In Bridgewater Township, collectors are subdivided into two functional road systems: primary (major) and secondary (minor). The primary or major road is so classified due to its higher traffic volumes (both present and anticipated), and its importance in the overall circulation system. Essentially, this type of road carries more vehicular traffic than the typical collector, yet it is not an arterial road. The secondary or minor collector is the more typical collector type road connecting local streets with arterials or primary collectors and is herein referred to as a collector.

Local Streets

Streets that primarily provide access to abutting properties, usually single-family homes. These roads typically have low traffic volumes and low speeds. The local road system contains the large majority of all roadway mileage in a state, but only a small percentage of total traffic

Access

Access is characterized as limited, partial, or full depending on the purpose of the roadway.

Limited access occurs on highways especially designed for through traffic. Abutting lot owners usually have a right to reasonable, but not direct, access. Interstate highways, parkways, and freeways are considered limited access highways.

Partial access occurs on arterial and collector roadways. An arterial transportation route primarily serves through traffic and provides access as a secondary function. An arterial may have signalized intersections and access via driveways and turn lanes may be restricted through the use of raised medians or Jersey barriers.

Collector roads primarily serve intra-county trips and are characterized by moderate volume and speed. They provide for land access, traffic circulation, and access to arterial routes. Access to abutting properties may or may not be restricted.

Full access occurs on local roads whose purpose is to provide direct access to abutting land and roads of higher classification. Mobility is lower than for other classifications and through movements are discouraged, especially in more urbanized areas.

THE STATE HIGHWAY ACCESS MANAGEMENT CODE

The State Highway Management Act was signed into law on February 23, 1989. Pursuant to this Act, the New Jersey Department of Transportation adopted the State Highway Access Management Code on March 25, 1992. The Municipal Land Use Law requires the contents of municipal ordinances governing subdivision and/or site plan approval to include provisions ensuring conformity with the

State Highway Access Management Code regarding any state highway within the municipality and with any County Management Code regarding any county roadway within the municipality.

The State Highway Access Management Code consists of two components. The first is an access classification matrix and the second is a desired typical section for each segment of each state highway. Access levels to each classification and segment of road are established in the Code with the overriding purpose of controlling access to adjacent lands commensurate with the classification, speed and design of the highway.

EXISTING RIGHT-OF-WAY WIDTHS

It should be noted that the right-of-way of a street is not synonymous with the width of the paved portion of the roadway, which is referred to as the cart-way width. The right-of-way includes the paved area, or cart-way, the shoulders, and most often the sidewalks, if present. Somerset County roadways generally range in right-of-way widths between 50 to 80 feet. The municipal roadways in Bridgewater Township generally range between 50 feet to 60 feet in right-of-way width.

It is recommended that street right-of-way maps be produced for Bridgewater Township from tax assessment maps and other relevant resources. Right-of-way can provide an indication of the traffic volumes traversing the road and its functional performance.

With proper land use planning and zoning controls, it is possible to limit the right-of-way and cart-way widths of roads, while providing sufficient room for designs that enable the safe and convenient movement of traffic. The RSIS standards apply to many residential subdivisions. As stated earlier in this document, it is a goal of Bridgewater Township to have the roads within the municipality improved to the degree necessary to provide safe and convenient traffic movement without having the effect of leading, or encouraging, development. It is also a goal of Bridgewater Township to prevent any road work, which may encourage inappropriate truck traffic, cause traffic speeds to unnecessarily increase, cut-back existing bicycle and pedestrian areas, or require the removal of existing streetscape vegetation along the road's frontage.

CONGESTION

A safe and efficient roadway system is vital for the continued economic health of Bridgewater Township. The Township has begun to identify roadways with congestion problems. Once congestion areas have been identified, a traffic analysis will be conducted. Recommendations to ameliorate congestion issues can be developed following such a traffic study. The road system should be analyzed in relation to the specific functional classification and level of service that is needed for that particular roadway.

TRAFFIC VOLUMES

Traffic volumes on roadways have been increasing as the Township and the surrounding areas have become more developed. This growth trend has resulted in increased travel times, capacity problems, diversion of traffic from highways to local roads, increased air pollution, and additional resources having to be diverted to new roadway construction. A traffic volume study should be performed in the Township to determine where volumes are approaching the effective design capacity of the roadway. Problem roadways showing potential problems should be identified for improvements in the Traffic Study.

TRAFFIC ACCIDENTS

An accident analysis should be provided in the recommended Traffic Study which would identify high collision locations. Such an analysis would identify specific intersections and/or road segments that warrant design improvements.

TRAFFIC CALMING AND SIGNAGE

Where appropriate, traffic calming techniques should be considered. Somerset County has established some target locations for traffic calming techniques.

"Pathways for the Garden State", prepared by ANJEC, January, 2004, discusses traffic calming:

Traffic calming is slowing the speed of motor vehicle traffic both by law (e.g., speeds of 20 mph or less in residential zones) and through physical impediments such as raised

intersections, speed bumps and road narrowing. This gives pedestrians, bicyclists and playing children equal rights to use residential streets.

The immediate purpose of traffic calming is to reduce the speed and volume of traffic to acceptable levels. The term "traffic calming" embraces a number of technical engineering solutions that alleviate speeding and cut-through traffic on neighborhood streets.

These are mostly physical measures that reduce the negative effects of motor vehicle use, alter driver behavior and improve conditions for non-motorized street users. Traffic calming measures rely on the laws of physics rather than on manipulating human psychology to slow down traffic. Traffic calming measures should be *self-executing*. If they require extensive police enforcement, they probably will not work in the long run.

Popular traffic calming devices include:

- Speed humps,
- Diverters/closures,
- Traffic circles,
- Other engineered measures (raised intersections and crosswalks, traffic circles, road narrowing, zigzag routes, curves, artificial dead-ends created by mid-block street closures).

The appearance and landscaping around signage that announces "Entrance to Bridgewater" should be beautified and maintained.

STREET NAMES

The 1996 Master Plan identified numerous roads with a recommendation to rename them to eliminate potential errors in providing emergency services.

The following streets were at issue:

Whitney Drive	Conflict with Whitney Court East.
Miller Lane	There are two locations in the Township.
Edgewood Terrace/Edgewood Drive	The street names are too similar.
Prospect Street	The two sections will never connect.
Washington Avenue/ Road/ Woodland Terrace	There is currently confusion at the Washington intersection. Where appropriate, Washington Avenue should be renamed to Woodland Terrace and Washington Road should be renamed Washington Avenue.
Juniper Lane	Determination should be made as to whether this roadway should remain as a dead-end road.
Aaron Court	This is phonetically similar to Erin Court.

The Board will consider re-naming the roadways, although there has been some restriction from some neighborhoods. The following is a list of historic street names that may be appropriate:

Bacon	Elmendorf	Opie
Billian	Ely	Purdy
Billis	Gaddus	Quick
Brush	Hodgebloom	Runk
Coejeman	Lane	Sloan
Cox	Langon	Stoven
Dalley	Little	Sydam
Dalrymple	Low	Van Pelt
Dennis		Van Trail
Dilts		Whitenack
Dutch		

HELISTOPS

Existing helistops that are no longer used should be de-commissioned, where possible.

IMPROVEMENT PLANS, PROGRAMS, AND STUDIES

Capital Improvement Plans

The municipal capital improvement plan is prepared on an annual basis. This plan is reviewed by the Planning Board and approved by the Town Council. The County has a 6-year capital improvement plan. The County plan is prepared annually and lists projects for the next 6 years. The County plan is prepared by the Department of County Engineering and is approved by the County Freeholders at a public meeting. The County solicits input from municipal representatives. The County plan has developed the following roadway projects that could impact the Township:

- A. The Finderne Avenue jug handle at Van Veghten Drive was provided for the following improvements: engineering design, construction, right-of-way, easements and inspections. Curbs, drainage structures, bituminous concrete pavement, traffic striping and beam guide rails will be a part of this project as well. The proposed improvements at Finderne Avenue and Van Veghten Drive have been endorsed by Bridgewater Township.
- B. In 2002 the intersection of North Bridge Street (CR 639) with Woodlawn Avenue was programmed for the following improvements: construction, right-of-way, easements and inspection.
- C. In 2002-2003 the Chimney Rock Road/Route 22 interchange was programmed for the following improvements: engineering design, right-of-way and easements, and construction and inspection.
- D. In 2002-2003 Chimney Rock Road, from Route 28 to Route 287 (including bridge widening over Route 287) was programmed for the following improvements: engineering design, right-of-way and easements, and construction and inspection.
- E. In 2004 the intersection of Chimney Rock Road with Thompson Avenue (CR 525) has been programmed for the following improvements: new traffic signal-engineering design, right-of-way, easements, construction and inspection.
- F. In 2004 the intersection of North Bridge Street (CR 639) with Mine Road has been programmed for the following improvements: Phase I engineering design, right-of-way and easements. Phase II construction, right-of-way, easements and inspection are also proposed.

- G. Main Street/Finderne Avenue has received the following improvements: engineering design, construction and inspection.
- H. In 2008 Foothill Road has been programmed for the following improvements: engineering design, construction, inspection, right-of-way and easements.
- I. Finderne Avenue from Main Street (CR612) to Route 28 has received the following improvements: engineering design, construction, right-of-way, easements and inspections. Curbs, drainage structures, bituminous concrete pavement, traffic striping; and beam and guide rail improvements will be part of this project.
- J. In 2008 Washington Valley Road, from Chimney Rock Road (CR525) to the Warren Township border has been programmed for the following improvements: engineering design, construction, right-of-way, easements and inspections. Curbs, drainage structures, bituminous concrete pavement, traffic striping, beams, and guide rails are also proposed as future improvements as part of this project.
- K. In 2008 Chimney Rock Road, from Route 287 to Route 22, has been programmed for the following improvements: engineering design, construction, right-of-way, easements and inspection. Curbs, drainage structures, bituminous concrete pavement, traffic striping, and beam and guide rails will be part of this project as well.
- L. In 2008 Chimney Rock Road from Route 22 to Thompson Avenue (CR 525) has been programmed for the following improvements: engineering design, construction, inspection, right-of-way, easements and inspection. Curbs, drainage structures, bituminous concrete pavement, bridges, traffic striping, beams, and guide rails will also be a part of this project as well.

The North Jersey Transportation Planning Authority (NJTPA) is Bridgewater's Metropolitan Planning Organization (MPO). The current Transportation Improvement Plan (TIP) has three road projects that will impact the portion of the Township that falls within the Regional Center. They are as follows:

- A. The Chimney Rock/Route 22 interchange is programmed for improvements. The design phase of this project has been initiated. This project is funded.

- B. Mountain Avenue (in Somerville) to the Bridgewater Commons Mall is programmed for a pedestrian overpass structure to provide access from Somerville to the Bridgewater Commons Mall and surrounding facilities. The structure will include both steps and American Disability Association compliant ramping as required. Construction began in the fall of 2004.
- C. Vosseller Avenue is programmed for drainage improvements on both sides of the road from Cedarcrest Road to a detention basin to be constructed in the traffic island between the westbound Route 22 and Ramp B. Commencement of design for this project occurred in 2003 and construction is scheduled for 2004-2005.

It is New Jersey Department of Transportation (NJDOT) policy that all roadways except limited access highways should be bicycle compatible. The Town will work with NJDOT to retrofit state roadways. As recommended previously, the Route 22/Chimney Rock Road improvement project will address appropriate opportunities for this activity. Emphasis for zoning compliance should be initiated in the Regional Center. The Route 22 Sustainable Corridor Improvement project will deal with the separation of traffic and will also incorporate appropriate streetscape amenities and pedestrian/building opportunities.

Planned Improvements

The policies stated in the New Jersey State Development and Redevelopment Plan relating to transportation have been considered and incorporated into the formulation of this Circulation Plan Element.

Bicycle Facilities

Bicycle parking facilities are key elements in a successful bicycle network. Parking facilities allow cyclists to secure their bicycle at the destination they are trying to reach. A lack of parking facilities can dissuade cyclists from making trips. Facilities should be located at both bicycle origins and destinations. Parking facilities are typically classified as being either long-term or short-term.

Long-term facilities provide a high degree of security and protection from the weather. These facilities are recommended where bicycles will be left unattended for longer periods of time. Typical facilities might include bicycle lockers, cages or rooms in buildings. Such parking might be found at condominium and apartment complexes, transit stations, places of employment, and higher-level campus oriented schools.

Short-term facilities allow a bicycle to be secured to some type of structure and do not typically provide protection from the weather. They are typically used where parking is decentralized, is visible, is conveniently located to the destination, and where the parking will be for a shorter period of time. Short-term facilities are typically bicycle racks. Bicycle racks come in a variety of forms and designs. Typical places for bicycle racks might be schools, playgrounds, recreational destinations, libraries, the post office and other municipal buildings. They are also appropriate in downtowns and on the premises of service and commercial buildings in downtowns.

It is recommended that the Township of Bridgewater provide bicycle parking facilities at all appropriate bicycle origins and destinations in the Township. An inventory should be taken of existing locations where parking already exists and locations where parking is lacking but should be provided. In addition, businesses should be encouraged to provide bicycle parking facilities for their employees.

Pedestrian Circulation

The pedestrian system in Bridgewater Township is largely defined by the roadway network and therefore consists primarily of the sidewalks and shoulders along the streets, and the crosswalks, curb ramps, medians and signals provided at intersections. Principal pedestrian streets generally consist of the minor arterial and collector streets in the Township,

Typical pedestrian distances are shorter than vehicle trip distances, and travel distance poses a greater limit on pedestrian travel compared to vehicle travel. As a result, the pedestrian network in Bridgewater Township includes numerous shortcuts and passages, including parking lots, alleys and pedestrian paths. Walkways to off-street parking lots provide a critical portion of the

pedestrian network, both to provide access to the parking lot and to allow cut-throughs between blocks.

Since there is a mix of land uses within Bridgewater Township and since there is a continuity of the pedestrian network you would conclude that a substantial portion of local trips are made by walking. Even though the current census shows that work trips made by walking has decreased it does not necessarily mean that all trips made by walking have also decreased. Elimination of vehicle trips by walking helps to enhance the quality of life, provides a healthy citizenry and reduces the total amount of traffic on local streets. Improvement of the sidewalks and their landscaping will make walking more appealing and further the goal of making Bridgewater Township a truly pedestrian-friendly community.

A sidewalk is an improved facility intended to provide for pedestrian movement usually, but not always, located in the public right-of-way adjacent to a roadway. Sidewalks are typically constructed of concrete, but can be built with other materials, such as asphalt or pavers. Sidewalks are especially important in densely developed areas, such as Township centers and residential developments. They are also important around schools, parks, municipal buildings, and senior citizen housing and other areas which promote non-destination walking, such as in the retail environment.

Currently, Bridgewater Township does not have studies or inventories that document existing pedestrian facilities, demands and expectations. It is recommended that a sidewalk inventory and community pedestrian demand and needs survey be performed to determine pedestrian facility use and need. Since the Regional Center is a targeted area for community involvement, sidewalks and bikeways should be provided for in development applications, and grant applications should be sought for these infrastructure improvements.

Intersections

Generally, the most concentrated area of pedestrian activity occurs at street intersections, especially in business districts. Not only do pedestrian flows intersect each other at these

locations but also these flows are interrupted by vehicular cross traffic and are exposed to vehicular turning movements. Since these areas have higher concentrations of pedestrians and cross traffic, they are the least desirable places for sidewalk impediments that constrict flow and may result in pedestrian overflow into vehicular spaces.

Pedestrian facilities should be designed to provide for pedestrian flows and the storage of pedestrians waiting to make their desired street crossing. It is desirable not to locate parking spaces, poles, mail boxes, bus stop shelters, planters, trees and similar items near crosswalks where they may obscure pedestrians and the handicapped from the motorists' view and decrease pedestrian storage and queuing areas.

Mass Transit

Bus Service

The public transportation in the Township of Bridgewater includes a network of bus routes and a commuter rail line. NJ Transit serves the Township for both rail and bus. There are a total of four different bus routes that serve the community.

Passenger Rail Service

The Bridgewater train station (formerly known as Calco) is on the southeastern edge of the Regional Center. This station is a part of the Raritan Valley line and has service from High Bridge to the west to Newark to the east. From this station it would take one hour and fifteen minutes to get to NYC Penn Station, with a switch in trains in Newark. This station has 23 eastbound trains and 26 westbound trains a day. In the past six years this station has witnessed an upgrade in its waiting area and a general improvement of the land use in the abutting areas.

The Finderne station is another station within the Regional Center. This station is located just off of Finderne Avenue just north of Manville. A total of three trains per day stop at this "station." This station does not have a building or other station-like features. This station is primarily a left-over from when the adjoining industrial areas relied on it to bring its employees to and from work. The majority of the employees in this area now drive to work.

Collapsible bicycles will be accommodated on all NJ TRANSIT trains at all times. During off-peak travel periods standard frame bicycles may be carried on-board and all day Saturday and Sunday. During peak travel periods, standard frame bicycles are only permitted on outbound trains scheduled to depart a cyclist's boarding station during the weekday morning commute. Standard frame bicycles are only permitted on inbound trains scheduled to depart a cyclist's boarding station during the weekday evening commute.

Paratransit

Each of the 21 Counties in New Jersey provides county-based Paratransit service for Senior Citizens and People with Disabilities. NJ Transit assists in the provision of accessible services by the counties and non-profit agencies through the administration of the Casino Revenue's Senior Citizens and Disabled Residents Transportation Assistance Program, and Federal Transit Administration (FTA) Section 5310, 5311, and 5307 Programs. Somerset County provides paratransit service for the community, operating a fleet of 106 vehicles, 74 of which are handicapped accessible.

Goods Movement

Moving freight, such as raw materials and finished products, is a subject of increasing importance to New Jersey. Businesses, jobs, and consumers all rely on it. The challenge is to develop regional goods movement strategies that will facilitate the flow of freight and minimize adverse impacts on local communities. A freight movement system for Bridgewater includes the highway network, a rail freight network and freight transfer facilities.

The elements of the transportation system are connected through numerous intermodal facilities. An intermodal transportation facility is a transportation hub that connects different modes serving intrastate, interstate, or international movement of people and goods. Because of the critical role these facilities play, they are vital components to economic vitality and growth.

The goods movement industry relies on the transportation network in Somerset County and throughout the state. Because of the county's extensive transportation network and proximity to

markets, the roadway network is seen as being vital to the industry. Trucks are the dominant mode of freight transportation in Somerset County. It is necessary to plan for the continued growth of trucking in and through the area. The added truck volumes and the delays caused by congestion and an inadequate transportation network for extensive freight traffic are issues that need to be continually addressed. Rail freight also plays a significant role in moving goods through the County. The southeastern portion of Bridgewater is crossed by rail freight line. Goods movement in Somerset County consists of two types: overhead and originating/terminating.

General Recommendations

- A. Update the functional classifications of the existing and proposed roadways within the Township of Bridgewater to meet today's existing and projected use. This should be done in recognition that commercial traffic should be discouraged from routinely using local roads.
- B. Update the required right-of-way and cart-way widths for each roadway functional classification to meet the existing and projected use. This may mean that County infrastructure improvements, including traffic calming improvements, are to be sought by the municipality.
- C. Update the proposed cross-section for roadways, including the number and width of traffic lanes and the requirements for shoulders, sidewalks and bikeways.
- D. Designate the location of intersections that need realignments, widening, and/or traffic control signals, the designs of which are to be engineered at the time the intersection is to be improved.
- E. Incorporate sidewalk and bikeway improvements into the five-year road improvement plan. This plan should study areas identified in the Township's Transportation Circulation Plan Element and prioritize the recommended improvements for infrastructure improvements that fall under municipal jurisdiction.
- F. The Township should identify those existing streets where a street name conflict exists. This should be done in conjunction with Bridgewater Township's 911 program and any conflicts should be resolved.

- G. There are areas of the Township that have a number of paper streets that will never be improved. A survey of those paper streets should be completed and those streets that are surrounded by Township and/or County open space parcels should be vacated. This will remove the paper street from the tax maps and allow the Township to merge properties creating larger parcels.
- H. The Township should work with Somerset County to determine if there are any locations that should be considered as park and ride facilities. The feasibility of constructing park and ride lots on agreed upon locations should be assessed.
- I. Require short- and/or long-term bicycle parking in all commercial districts, in employment centers and multifamily developments, at schools, in industrial developments, at special events, in recreational areas, and transit facilities.
- J. Endorse the guidance provided in the NJDOT Bicycle Compatible Roadways and Bikeways Planning and Design Guidelines. Note that this document is an extensive publication that provides guidance on bicycle facilities and design. Quick reference for the document is available on the internet at:

http://www.state.nj.us/transportation/publication/bike_guidelines.htm
- K. Implement pedestrian improvements as part of all transportation improvements, including road construction, reconstruction, traffic calming, and intersection improvements, wherever feasible.
- L. Ensure that projects in the Township conform to the NJDOT Pedestrian Compatible Planning and Design Guidelines. Please note: This document is an extensive publication that provides guidance on pedestrian facilities and design. Quick reference for the document is available on the internet at:

http://www.state.nj.us/transportation/publication/pedestrian_guidelines.htm
- M. Traffic calming techniques should be used as a tool to increase pedestrian safety and access.
- N. Coordinate with the county and state to identify major truck routes through and around the Township.
- O. Identify existing or future roadway features that are unsafe or limit the passage of trucks.

- P. The NJ Transit bus service (Route 114) that stops at the Commons mall should be extended into Raritan.
- Q. Install bus shelters at designated bus stops.
- R. Install traffic calming measures where needed. These may include speed bumps, pavement surface modifications, striping, reduction of cartway width, stop signs and other measures.
- S. Consideration should be made to close the NJ Transit Finderne station.
- T. Consideration for the development of a train station at Route 202 and Milltown Road should be abandoned.
- U. Develop benchmarks which the community can gauge current and future compliance and noncompliance with overall plan goals. These may include transit-supporting population densities, transit level of service based not only on capacity, but also on headways (time between service), and other service characteristics, walk mode share, pedestrian facility mileage, poor sidewalk condition, pedestrian-friendly areas guidelines, vehicle miles traveled (VMT) per capita, vehicle air pollutant emissions, poor bridge/pavement condition, bicycle mode share, bicycle facility mileage, provision of bicycle facilities/amenities at transit hubs and other activity centers.
- V. The Land Use Code of Bridgewater Township should be amended to confirm that the standard Township streetlights are required at all intersections and at any cul-de-sac bulb. Additionally, the Township Engineer shall identify roadway curves or lengths where additional lighting is needed. These standards should be applied for all subdivision and site plan applications. All associated electrical work shall also be required to be underground.

CONSERVATION PLAN

Goals in addition to those identified in the 1990 Master Plan are:

- A. Increased monitoring of fuel loading in the woodlands of the Watchung Mountains. The Township should seek funding for an analysis of the forest floor to determine if removal of dead vegetation material is warranted.
- B. The Township should work with Somerset County for programs which will remediate the Brownfields sites located in Bridgewater as identified in the Site Remediation Program (SRP) dated 2000.

PARKS, RECREATION AND OPEN SPACE PLAN

PARKS, RECREATION AND OPEN SPACE

The Parks and Open Space map consists of major public parks, recreation facilities, open space, and Green Acres lands located in the Township of Bridgewater. The purpose of the map is to recognize existing areas devoted to parks, recreation and open space as well the important contribution they make to the Township's desirability as a place to live, work and visit. It has a total area of approximately 2,791 acres and consists of Township, County, State and Somerville owned parkland. The park designations are proposed to remain largely unchanged with the exception of the Raritan River Greenway because no major park facilities are planned at present. There is, however, a need for additional parks, recreation and open space in the Township.

MUNICIPAL GOALS AND OBJECTIVES

The Township of Bridgewater has made the preservation of open space and the development of recreational facilities a priority. To help achieve this goal, the 1990 Bridgewater Master Plan and 1996 Re-examination Report both contained an Open Space and Recreation Element. The Open Space and Recreation Plan which was adopted in 2000 and revised May 23, 2002, further addressed the Township's parks, recreation and open space efforts and supplemented the Open Space and Recreation components of the Master Plan. Together, these documents contain parks, recreation and open space goals and objectives that can be summarized as follows:

- A. Monitor the inventory of recreation facilities to ensure that adequate passive and active recreation areas are available and properly maintained throughout the Township.
- B. Maintain and preserve the existing parks and recreation parcels within the Township with a goal of acquiring and preserving additional properties for conservation as well as active and passive recreational uses.
- C. Pursue funding through Federal, State and County agencies to help acquire, maintain and improve recreation and open space facilities. Work with non-profit organizations and private property owners to acquire deed restrictions and conservation easements for open space.
- D. Utilize the parks, recreation and open space standards of the New Jersey Department of Environmental Protection Green Acres program to evaluate the adequacy of the Township's existing system and work to address recreation and open space needs in underserved areas and neighborhoods.

- E. Support the Regional Center process as a means to improve and create parks and open space areas within the Township and other member communities.
- F. Incorporate parks, recreation and open space into land use focus areas and future redevelopment sites such as the East Gateway and Chimney Rock Road corridor.
- G. Utilize neighborhood planning to address parks, recreation and open space needs in Finderne, Bradley Gardens and other areas of the Township where there are few large parcels available.

REGIONAL CENTER VISION

The Township of Bridgewater is an integral member of the Somerset County Regional Center. The Regional Center was designated by the New Jersey State Planning Commission in 1996 to provide a coordinated planning framework for the Center and its member municipalities to address growth and quality of life issues for the residents, businesses and visitors. The Regional Center Vision Initiative, prepared in 1999, outlined several goals and objectives for open space preservation and recreation facilities. These were confirmed through the public participation process for the Master Plan Update and include the following:

- A. Create an open space system of lands of regional and local significance.
- B. Preserve natural resources and open space in order to shape the extent and location of growth and development.
- C. Match parks, recreational facilities and open space to accommodate the needs of a growing and diverse population, including parks where pets are particularly welcome.
- D. Locate specific land areas suitable for active recreation such as multi purpose ballfields, courts and biking/walking paths.
- E. Create and expand a greenway and trail system in the Regional Center including the Middle Brook Trail, Peter's Brook and Raritan River Greenway to connect natural resources, parks, neighborhoods and activity centers. Bridgewater Township and Somerville Borough are working together to extend a greenway along Peters Brook into Bridgewater Township from Somerville. This will include providing a pedestrian overpass at Route 202-206 to connect Somerville with Clarks Woods. This greenway would follow Peter's Brook onto the Bridgewater-Raritan High School property. A connection should also be pursued from the Commons Mall onto Prince Rodgers Avenue to connect recreational facilities in that area. The greenway would then continue across North Bridge Street where with the cooperation of Somerset County it could be extended along Vogt Drive and Somerville Road to the Bridgewater-Raritan Middle School.

- F. Preserve and acquire unique sites having environmentally sensitive areas, cultural value or historical significance. The Township of Bridgewater should work with the owners of the larger private sites to determine if there are opportunities for sharing of existing facilities or for future acquisition by the Township.
- G. Strengthen connections, provide active and passive recreation opportunities and create linkages to surrounding residential neighborhoods, downtown areas and from the Raritan River Greenway.
- H. Pursue alternative means of funding for park development and maintenance including greater access to the County Open Trust Fund and State Green Acres program, as well as other non-profit and state programs.

EXISTING INVENTORY

The Township of Bridgewater contains a significant amount of recreation and open space properties that are under municipal ownership. Bridgewater has a total of 3,934 acres of parks, recreation and open space within its borders as shown in Table 1. Greater than half of the Township's recreation land is passively used, one-quarter is used for active recreation and the remaining is undeveloped. Somerset County owns 1,869 acres of parks and recreation land, 583 acres are held under farmland preservation, 547 acres are under private or semi-public ownership, 53 acres are owned by Somerville for recreation and the State owns 44 acres. This contributes to a large, diverse and high-quality parks, recreation and open space system available to Township residents and portions of the Regional Center.

A study should be undertaken to evaluate available recreation sites including municipal, county, private industry and Board of Education properties. Negotiation should be considered to maximize available recreational fields.

Table 1 Parks, Recreation and Open Space Bridgewater Township	
Ownership	Acres
Bridgewater Township	838
State Land	44
Somerset County	1,869
(Private or Semi-Public)	547
Farmland Assessment	583
Somerville Borough	53
Total	3,934
<i>Source: 2000 Bridgewater Township Recreation and Open Space Plan; 2003 ROSI</i>	

As represented in Table 1 above, and Table 7, there are 48 properties that total approximately 583 acres that are participating in this program. The Township should encourage the preservation of farmland that are available for permanent preservation and interface with the owners of agricultural lands to facilitate the preservation through the several programs.

TOWNSHIP OWNED LAND

The Township of Bridgewater has 838 acres of parks, recreation and open space as shown in Table 1. This represents approximately 4 percent of the total land area within Bridgewater. The Township's system includes neighborhood parks, larger community parks and multiple parcels of yet-undeveloped open space.

Table 2
Active Recreation Facility
Bridgewater Township

Facility	Block	Lot	Acres	Amenities	# of Fields	Lights
Alfred S. Brown Park	121	76	9.25	Playground, tennis, ball fields, soccer fields, roller hockey, walking trail	3	No
Belair Place	245	1	1.26	Playground, basketball, open area	0	No
Cedarbrook Park	484	17	5.26	Playground, walking trail, pond	0	No
Chimney Rock	802	126	23.95	Playground, tennis, basketball, ball fields, walking trail, roller hockey, restrooms	4 baseball spring 1 baseball fall 2 soccer fall	No
Crim Road Soccer Fields	700	74	26.68	Soccer, walking trail	4	No
Garretson Road	472	76	5.84	Tennis	0	No
Glen Road	362	11	2.21	Playground, tennis, basketball	0	No
Green Knoll Field and Park	411.01	41	4.41	Ball fields, soccer, restrooms	1 soccer 1 baseball	No Yes
Harry Ally	254	10.01, 11, 29-44	15.03	Playground, tennis, basketball, ball fields, soccer, roller hockey, walking trail, restrooms	3 baseball 1 soccer	2 Yes 1 No No
North Bridge Street	515.01	1,4	4.3	Playground, ball fields, soccer, restrooms	2 baseball	1 Yes 1 No
Old York Road Ardmaer Park	139	1	4.78	Playground, ball fields, pond	1 baseball	No
Peterpar Park	504	13	2.62	Playground	0	No
Prince Rodgers Baseball Complex	515/ 515.02/ 515.03/ 515.04/ 515.05/ 515.06	1/ 1,6/ 1-5/ 1/ 1,2/ 1	22.7	Little league fields, full-sized ball field, parking, walking trail	5 baseball	4 Yes 1 No
Rolling Knolls	418	25	1.72	Playground, ball fields, soccer	1	No
Shady Lane	365	20	1.21	Playground, basketball	0	No
Slattery Park/Kidstreet	411.01	42	4	Playground, restrooms	0	No
Somerville Manor	518	6-11	2.15	Ball fields, basketball, playground	1	No
Thomae Park (Nagle Street)	380	8	8	Ball fields, playground	1	No
Total			145.37			

Source: 2000 Bridgewater Township Recreation and Open Space Plan; 2003 ROSI

Tables 2 and 3 list the Township's existing active and currently undeveloped sites which represent approximately 838 acres of Bridgewater land. There is a total of over 145 acres of active recreation facilities in Bridgewater. Some of the larger parcels within the Regional Center include Chimney Rock Park, and Prince Rodgers Baseball Complex. The currently-undeveloped recreation sites total approximately 693 acres. They are located throughout the Township. Some of the larger parcels include 109 acres off of Van Holten Road, 50 acres off of Mt. Vernon Road, and approximately 56 acres off of Totten Drive.

Table 3 Currently Undeveloped Open Space/Recreation Sites Bridgewater Township			
Site	Block	Lot	Acres
Arbor Way	802	55	4.34
Bluestone Lane	624/633	63/27	12.52
Brookside Drive	806/813	12/6	19.68
Brown Road	622	50	6.9
Brown Road	624	30,31	10.15
Cathy Court	368	17	1.19
Chimney Rock Road	802	125	4.65
Claire Drive	638	28	1.53
Collins	652	45	30.0
Country Club Road	461	41	7.5
Crestwood Drive	500	21	0.85
Crim Road	652	75,75.01	32.28
Curtis Trail	802	114	11.15
Dartmouth Avenue	222	29	1.6
Fairway Court	472	8	1.8
Frohlin Drive	618	35	30
Garretson Road	408	27	1.02
Gateshead Drive	652	15	10.01
Gessner	382	7	9.03
Hancock	535	1.02	10.0
Hill Lane	424	7	1.4
Hillcrest Road	814	22	2.03
Hirsch	534	9 -16	5.107
Mancuso	255	36	2.71
Meadow I	444	6	12.8
Meadow II	447	14	5.5

Table 3 Currently Undeveloped Open Space/Recreation Sites Bridgewater Township			
Site	Block	Lot	Acres
Milcrip Road	408	47	2.07
Mt. Vernon Road	652/649	45.01,48.01/60	50.4
Northern Dr	642	35	8.11
Perrine Road	806	23	0.78
Petron Place	476	12	0.82
Reynard Road	442	19	6.5
Roger Avenue	622	27	1.35
Route 202-206	164	6.04	24.34
Running Brook Road	652	201, 83	6.53
Sami/Tullo Farm	722	9.01	14.25
Sarah Court	649	32	5.39
Schwabe	601	111	25.0
Solomon Drive	649	21	13.21
Talamini Road	462	1.02	2.19
Thruway Drive	472	40	5.22
Totten Drive	717/721	24/64,113	56.22
Tullo Farm Road	706	51	10.53
Tullo Road	706	52,3	20.44
Van Holten/Darby	426	12,14	109.87
Vogel/Goldstein	721	51	29.0
Vosseller Avenue	802	79	24.61
WILCAR	254	16	2.06
Wishnow Way	649	8	2.82
Wren Way	642	34	1.85
YMCA	601	1	7.23
Zimmerland	601	5	26.26
Total			692.797

Source: 2000 Bridgewater Township Recreation and Open Space Plan; Bridgewater Township Planning Board (Post-2000 Data); 2003 ROSI

STATE OF NEW JERSEY

The State of New Jersey owns 44 acres along the North Branch of the Raritan River in the Township for watershed protection purposes. This area is located in the Bradley Gardens section of the Township, southwest of the Regional Center. As expansion of the Raritan River Greenway extends outside of the Regional Center towards Duke Island Park, it is important to create links to the State owned property.

Bridgewater Township and Somerville Borough are working together to extend a greenway along Peters Brook into Bridgewater Township from Somerville. This will include providing a pedestrian overpass at Route 202-206 to connect Somerville with Clark Woods. This greenway would follow Peter's Brook onto the Bridgewater-Raritan High School property. A connection should also be pursued from the Commons Mall onto Prince Rodgers Avenue to connect the recreational facilities in that area. The greenway would then continue across North Bridge Street where with the cooperation of Somerset County it could be extended along Vogt Drive and Somerville Road to the Bridgewater-Raritan Middle School.

SOMERSET COUNTY LAND

Within its borders, Bridgewater Township has 1,869 acres of parks, recreation and open space under County ownership as shown in Table 4. This represents almost 9 percent of the total land area of Bridgewater Township. The various County properties are used for active and passive recreation as well as open space. While many of these areas are located outside of the Regional Center boundary, they have a significant impact on the entire recreation and open space opportunities and serve as an asset to the Regional Center in terms of quality of life, community character, recreation and conservation. These projects are incorporated into the land use plan for Bridgewater Township and include:

- A. Somerset County's plan for the creation of a new park along the Raritan River south of Loeser Avenue. The concept plans propose a mix of active and passive uses. Needed baseball and softball fields are part of this proposal, in addition to multi-purpose fields that can be used to meet a growing demand for field hockey, lacrosse and Pop Warner Football. The Township should support the implementation of this plan. Access issues will be detailed as the plan is moved forward.

- B. The concept by the owners of the former American Cyanamid/Wyeth facility in Finderne to create a recreational complex that perhaps might include an 18 hole links-style golf course. The concept plan contains sufficient areas for other forms of active recreation, wildlife habitat, riverfront greenway, open space as well as non-recreational uses. This is a proposal that merits serious consideration and should be further pursued with both the owners and Somerset County to determine a feasible plan.
- C. Study of the 109-acre Darby tract should be made to determine the best course of action to be taken for the possible creation of a neighborhood park. Existing habitats, wildlife buffers, access and parking concerns should all be evaluated as part of this study.
- D. Somerset County is owner of a 109 acre tract of land that has frontage on both Old York Road and Milltown Road in the southwest portion of the Township. Approximately five years ago, the County expressed an interest in developing bicycling oriented facilities that included a cyclo-cross trail and a criterium course. This plan was dropped due to the impacts to the surrounding residential areas. A modified master plan proposed creating open play areas, hiking trails and picnic groves as a more appropriate use of the site.
- E. Bridgewater Township recently acquired 30 acres of land fronting on Washington Valley Road just east of Mt. Vernon Road. This parcel is partially contiguous to a 52.65 acre tract of land owned by the Board of Education that has not been developed. Bridgewater Township should work with the Board of Education to determine the feasibility of utilizing a portion of these properties for recreational fields.

SOMERSET COUNTY BIKEWAY PLAN

Somerset County does not have a comprehensive County-wide Bikeways Plan, however in 1998 they partnered with Ridewise, the County's Transportation Management Association, in a mapping effort that rated the County roads for compatibility with biking. The map showed the major opportunities for linking activity centers and County park facilities.

The County should continue this effort and work with Bridgewater Township to create bicycle trails and links to existing trails along the Middle Brook, Raritan River Greenway, Peter's Brook and North Branch. A future bikeway should link established neighborhoods and commercial areas to parks and trails throughout Bridgewater and the Regional Center.

Table 4 Somerset County Parks and Open Space Bridgewater Township				
Facility	Location	Block	Lot	Acres
Green Knoll Golf and Tennis Center	Garrettson Road	472	77	152
North Branch Park	Milltown Road	166/165/168	2.01,3,5/6.03/ 14,17	177
North Branch Greenway	Milltown Road	166	1	40
Raritan River Greenway	Watson Street	100/101/122/ 125/131/132	1-5, 7,8 /1 / 1,2,3,11/4/3/1	105
Duke Island Park	Old York Road	102	8-10,39	302
Chipman Tract	Old York Road	108	2,13	109
Washington Valley Park East	Vosseller Avenue	801/802	14-20,40, 55,56/124	317
Washington Valley Park West	Vosseller Avenue	706/707/711	6,7,8/27,53,54/5	369
Second Watchung Open Space	Washington Valley Road	901/904/905/906	1,11.01/44/2,3, 5.01/21,22,39.02	165
Snearowski Farm	Meadow Road	441	1	29
Owens Property	Blazier Road	907	60.10	15
Finderne Avenue	Finderne Avenue	303	8	76
Vosseller Avenue	Vosseller Avenue	801	61	13
Total				1,869

Source: 2000 Bridgewater Township Recreation and Open Space Plan; 2003 ROSI.

Bridgewater Township continues to implement the Middle Brook Trail, a network of hiking/biking trails, bridges and boardwalks that provides outdoor recreational opportunities along the Middle Brook. Local volunteers, including many Boy Scouts and Girl Scouts, have completed most of the required improvements. Students from the New Jersey Institute of Technology have participated in the design and construction of another bridge project. Other volunteers provide assistance in the maintenance of the trail system. The Township should continue to implement the required improvements ensuring that adequate access and parking are provided to minimize impacts to the abutting residential neighborhoods.

PRIVATE AND SEMI- PUBLIC LAND

Within Bridgewater Township, there is approximately 547 acres of private and semi-public recreation lands which contribute to the overall quality of life. These facilities, as shown in Tables 5 and 6, help relieve pressure on the existing Bridgewater Township parks and recreation facilities. Their status should be encouraged and stabilized by ordinance, where appropriate. As noted previously, the Township should re-zone Block 400, Lots 8 and 9 and Block 401, Lot 4 (Raritan Valley Country Club) to a Golf Course zone. The intent is to vest the existing uses as permitted principal and accessory uses.

Table 5 Semi-Public Recreation Facilities Bridgewater Township				
Name	Location	Block	Lot	Acres
Camp Cromwell/Boys Club of New York	Vosseller Avenue	807	1,56,71	100.42
Raritan Valley County Club	Route 28	400/401	8,9/4	155.86
Somerset YMCA	Garretson Road	472	74	12.28
Somerset Aerie (Eagles Club)	Woodside Lane	221	41	9.99
Coppermine Swim Club	Foothill Road	642	5	2
Glen Ridge Swim Club	Talamini Road	469	1	2.54
Glenwood Terrace Homeowners Association	Glenwood Terrace	640	32	4.5
Juniper Lane Swimming Club	Juniper Lane	444	41.01	3.34
Jewish Community Center	Talamini Road	477	53	13.22
Washington Campgrounds Association	Middlebrook Road	816	13	19.46
Sunset Lake Swimming Club	North Shore Drive	603/608	7/1	20.66
Total				344.27

Source: 2000 Bridgewater Township Recreation and Open Space Plan; 2003 ROSI.

Table 6 Privately Owned Open Space Bridgewater Township				
Association	Location	Block	Lot	Acres
Deer Chase Run Homeowners	Dow Road	460	29	5.12
E.H.H.	Muirfield Lane	624	17	19.14
E.H.H.	Muirfield Lane	625	22	7.32
Parkside Estates	Beach Avenue	121	75	14.13
Prince Rodgers Park				19.7
Running Brook/Manors	Running Brook Road	652/653	107,200,84/38,18	23.65/11.47
Running Brook/Manors	Westbrook Road	656	2	16.71
Somerset Fish and Game	Milltown Road	166	1.01	15.9
Spring Run	West Circle Drive	702	22,23	9.08
Green Knoll Homeowners Association	Dow Road	461	1	40.12
London Farm	Mayflower Ct.	806	64	8.35
PBI Construction Co, Inc.	Kennesaw Way	713	8,23	5.82
PBI Construction Co, Inc.	Tullo Farm Road	714	13	1.01
Irish Glen Neighborhood Association	Morgan Lane	225	7.19	4.98
Wild Flower Ridge	Shields Lane	180.03	9	0.78
Total				203.28

Source: 2000 Bridgewater Township Recreation and Open Space Plan; Bridgewater Township Planning Board (Post-2000 Data); 2003 ROSI.

Table 7 Bridgewater-Raritan School District Inventory of Acreage	
Presently in Use:	
Adamsville School	17.0 acres
Bradley Gardens School	11.0 acres
Crim School	13.0 acres
Hamilton School	19.0 acres
Kennedy School	11.0 acres
Van Holten School	16.0 acres
Eisenhower School	18.0 acres
Hillside School	20.0 acres
Middle School	49.0 acres
High School (including Basilone and Maintenance area)	85.58 acres
Wade Administration Building	11.5 acres
Other Properties:	
Writus Tract – Washington Valley Road	52.0 acres
Mountainside Park – Somerville Road	10.0 acres

FARMLAND

Bridgewater Township was once a large farming community, prior to the suburban development that has consumed most of the farmland. However, Bridgewater has 48 properties with approximately 583 acres of farmland, as shown in Table 7. Programs that encourage the continued use of farmland over the development of viable agricultural areas should be publicized.

In Somerset County, there is over 3,300 acres of farmland preserved, with additional properties under consideration.

Table 8 Farmland Assessed Properties Bridgewater Township			
Block	Lots	Location	Acres
168	18	Milltown Road	28.2
168	23	Milltown Road	9.2
168	27	Milltown Road	9.4
170	4	Route 28	14.9
300	17, 18, 19, 20, 22	Meyer Avenue	12.1
302	1, 3, 4, 7	Dewey Avenue	6.5
303	8.02	Finderne Avenue	10
429	53	Meadow Road	30
441	1	Meadow Road	27.1
441	4	Meadow View Drive	8.7
443	19	Meadow Road	19.1
444	6	Meadow Road	12.8
447	15	Country Club Road	1.4
447	14	Meadow Road	4.5
477	45,46	Route 202-206	13.2
652	45	Washington Valley Road	42.4
652	46	Washington Valley Road	8.8
701	5	Washington Valley Road	8.2
705	28	Newmans Lane	29
707	29	Quarry Lane	9.5
711	7	Frontier Road	17.8
711	13	Foothill Road	39.1
712	4	Foothill Road	34
801	46	Thompson Avenue	27
812	49	Stangle Road	7.3
813	10, 11	Brookside Drive	4.1
821	8	North Mountain Avenue	10
821	14	Route 22	11.5
902	39	Hunter Road	9.7
905	11	Washington Valley Road	14
904	44	Washington Valley Road	22
905	5.01	Washington Valley Road	23.2
906	7	Drum Hill Road	10
906	20	Washington Valley Road	5
906	65	Mt. Horeb Road	5.5
906	68	Long Road	12.2
907	41	Mt. Horeb Road	18.2
907	77	Washington Valley Road	7.4
Total			583
Source: 2000 Bridgewater Township Recreation and Open Space Plan; Bridgewater Township Planning Board (Post-2000 Data); 2003 ROSI.			

Table 9 *SCORP Balanced Land Use Standard Bridgewater Township	
	Acres
Total Land Area	20,834
State Land	44
County Land	1,869
Farmland Assessment	583
Private or Semi-Public	547
Somerville Owned Land	53
Remaining Township Land area	17,738
3% of developed and developable land	532
Township Owned Paths/rec/os	838
<i>*Source: New Jersey Statewide Comprehensive Outdoor Recreation Plan</i>	

Therefore, Bridgewater Township has adequate land area devoted to these purposes.

NEW JERSEY GREEN ACRES POPULATION STANDARD

The New Jersey Green Acres Population Standard is the second method identified in the SCORP. It provides a method of analyzing the impact population growth will have on the demand for recreational facilities within a community. The population method calculates the size of a particular facility based upon a recommended acreage per person. For example, it recommends 1.5 acres per 1,000 people for tot lots and playgrounds, 1.5 acres per 1,000 people for playing fields, and 5 acres per 1,000 people for neighborhood or community parks. Bridgewater should have almost 350 acres of active recreation facilities under the New Jersey Green Acres Population Standard (GAPS). Accordingly, the Township has 30.5 acres devoted to tot lots and playgrounds, 45.1 acres of playing fields, and 160.6 acres of neighborhood community parks. Using the Population Standard and the 2000 Census figures (population 42,940), the Township is deficient in each of the suggested acreage categories.

Table 10 SCORP Acres per Population Standard Bridgewater Township				
Use	Suggested Acreage	Existing Acres	Reviewed Acres per GAPS	Surplus (Deficit)
Tot Lots and Playgrounds	1.5 acres per 1,000 people	30.5	64.3	(33.8 ac.)
Playing Fields	1.5 acres per 1,000 people	45.1	64.3	(19.2 ac.)
Neighborhood Community Parks	5 acres per 1,000 people	160.6	214.5	(53.9 ac.)
<i>Source: New Jersey Statewide Comprehensive Outdoor Recreation Plan, 2000 U.S. Census</i>				

FUTURE RECREATION, PARKS AND OPEN SPACE

Bridgewater has the recommended land area, however, it should endeavor to develop the recommended recreational facilities for its residents.

Note: Available land has not been studied for environmental constraints which would make difficult the construction of recreation facilities.

COMMUNITY FACILITIES

INTRODUCTION

As the Township has grown over the years, community facilities have been expanded to serve the rising population and new development. These facilities include the municipal administration, recreation, health and human services, as well as such essential municipal services as police, fire, emergency response, and public works. Community facilities also include educational resources such as schools and libraries, in addition to hospitals and other medical institutions.

MUNICIPAL FACILITIES

Administration Complex and Police

The Township administration complex is located inside the Regional Center at 700 Garretson Road. The complex, a converted grade school, houses municipal administrative functions. The police, municipal court, and council chambers are located in an annex to the municipal building. For several years, space shortages and maintenance have been a problem in both buildings. The Township has considered a variety of measures to address these problems over the years. Plans are underway to retain an architectural firm to develop plans that will address these needs in a comprehensive fashion.

New Public Works Facility

Bridgewater Township and the Borough of Bound Brook are working with Somerset County to develop a shared public works facility on approximately 15 acres of property that Somerset County has purchased from Stavola Quarry along Chimney Rock Road.

Fire Protection/Emergency Response

Fire protection in Bridgewater is provided by six volunteer fire companies: Finderne, Bradley Gardens, Country Hills, Green Knoll, Martinsville, and North Branch. Five volunteer rescue squads serve the Township: Bradley Gardens, Finderne, Green Knoll, Martinsville, and Bound Brook. Fire and rescue dispatch is handled by the Township police.

The Township has experienced continuing difficulty finding an adequate number of volunteers to respond to daytime calls. To address this issue, several Township employees have volunteered

to respond to calls, when necessary. The Finderne First Aid and Rescue Squad donated an ambulance for these employees to use, which the Township equipped. To ensure that personnel with the required skill levels are available, these employees will receive and maintain additional emergency response training.

The Bradley Gardens Fire Company and the Bradley Gardens Rescue Squad are working together to possibly co-locate as part of a new facility to be constructed on Old York Road or remain as located.

SCHOOLS

Elementary and Secondary Schools

Public elementary and secondary education in the Township is provided by the Bridgewater-Raritan Regional District. The district, which serves both Bridgewater and the Borough of Raritan, is restructuring to include seven elementary schools for grades K-4, two intermediate schools for grades 5-6, a middle school for grades 7-8, and a high school for grades 9-12. Since initial expansion, every school has been expanded.

Table 1 Bridgewater-Raritan Regional School District Enrollment			
Grades	1996 Enrollment	2004 Enrollment	2008 Enrollment (projected)
K-3	2,204	2,764	2,839
4-5	1,006	1,457	1,555
6-8	1,354	2,094	2,271
9-12	1,677	2,340	2,955

Table 2 shows actual enrollment in 1996 and 2004 and projected enrollment in 2006. As shown in the table, the school district has been experiencing rapid enrollment growth in recent years and expects this high rate of growth to continue in the intermediate, middle, and high school grades. To cope with this increase in the student population, the district has expanded all of the district's schools as well as building a new elementary school. The district has also developed a five-year

Capital Improvement Program, which was accepted by the New Jersey Department of Education in 2001.

Somerset County provides vocational and technical education within Bridgewater. The Somerset County Vocational and Technical High School, serving grades 9-12, is located at North Bridge Street and Vogt Drive, near the Bridgewater Library. The facility provides vocational-technical training, an alternative high school, and a variety of customized courses. The school also has programs open to high school graduates.

Higher Education

Bridgewater is served by Raritan Valley Community College, a regional college serving Somerset and Hunterdon Counties. The College offers approximately 70 associate degree programs as well as customized and non-credit courses. It also offers selected four-year degree programs. Two major research universities, Rutgers and Princeton, are also located within 20 miles of Bridgewater Township.

LIBRARIES

The Bridgewater Library is operated by the Somerset County Library System and serves as the main headquarters for the system. The facility is located at 1 Vogt Drive, off Bridge Street north of Route 287. This facility, which was renovated and expanded in 2001, is one of nine branches and stations operated by the library system throughout Somerset County.

COMMUNITY CENTERS

There are several community centers within the district, such as the Martin Luther King, Jr., Community Center on Prince Rodgers Avenue, People Care, JCC, 4-H and the Senior Citizen Center.

HEALTH CARE

Hospitals

The closest full-service hospital to Bridgewater is the Somerville Medical Center, located within the Regional Center in the Borough of Somerville. The 365-bed medical center provides a range of outpatient, inpatient, and community services. Additional specialized hospital services are available at St. Peter's Hospital and Robert Wood Johnson University Hospital in New Brunswick, located 12 miles southeast of Bridgewater.

Mental Health Center

The Somerset County Mental Health Center (Richard Hall), located at 500 North Bridge Street, provides comprehensive services for county residents experiencing mental or emotional illness. Outpatient care, 24-hour acute care, an adult care program, school liaison services, and an adolescent program are among the services provided.

Shared Services

For many years, Bridgewater Township has pursued shared-services agreements with the school district, other municipalities, and other levels of government. The Township currently shares some municipal staff including the Grants Manager and Housing/Welfare Directors with surrounding municipalities and has access to a refueling station that it shares with the New Jersey Department of Transportation and the Bridgewater-Raritan Regional School District. The Township continues to look for additional opportunities to share services wherever possible.

- A. The possibility of pursuing additional shared services with surrounding municipalities or Somerset County should also continue to be explored for its potential to reduce the amount of space needed in the new municipal complex facility. These may include Health Services and Public Works.
- B. Police, fire, and emergency response services should continue to be monitored to ensure that adequate service is provided.
- C. The school population within the Bridgewater-Raritan Regional School District continues to grow. Public school facilities, including fields, serving Bridgewater should be evaluated for

their capacity to handle the expected growth. The Township should continue to explore sharing facilities and services with the school district to avoid unnecessary duplication.

- D. The Bridgewater Library should be considered a core community facility. The County Library must be maintained at a level that will adequately serve both the immediate community and the broader region. Strengthening reciprocal sharing programs between the Bridgewater Library and other community facilities in the Township should be encouraged.

STATE DEVELOPMENT AND REDEVELOPMENT PLAN

The Bridgewater Township's Re-examination Report and Master Plan Amendment was prepared as part of the Regional Center Strategic Plan, an initiative that is intended to implement the policies of the State Development and Redevelopment Plan in Somerset County. The Somerset Regional Center, consisting of a portion of Bridgewater as well as Raritan and Somerville, was the first Regional Center to be designated by the State Planning Commission (1996).

GOALS

The State Development and Redevelopment Plan includes eight statewide goals:

- A. Revitalize the State's Cities and Towns
- B. Conserve the State's Natural Resources and Systems
- C. Promote Beneficial Economic Growth, Development and Renewal for All Residents of New Jersey
- D. Protect the Environment, Prevent and Clean Up Pollution
- E. Provide Adequate Public Facilities and Services at a Reasonable Cost
- F. Provide Adequate Housing at a Reasonable Cost
- G. Preserve and Enhance Areas with Historic, Cultural, Scenic, Open Space and Recreational Value
- H. Ensure Sound and Integrated Planning and Implementation Statewide

These goals are intended to fulfill the vision of the State Planning Act in which development and economic growth are encouraged in suitable locations with existing infrastructure, sprawl is reduced, and areas of environmental quality are preserved. This Master Plan Re-examination Report and Master Plan Amendment strives to implement the overall goals of the State Plan. It sets forth policies which further the revitalization of established neighborhoods in the Township. The Plan Amendment also recommends policies which protect the Township's environmental assets and preserve the quality of life that is enjoyed in Bridgewater Township.

For the most part, the Regional Center of Bridgewater is located inside State Planning Area 1, the Metropolitan Planning Area, which consists of existing developed areas with substantial amounts of

existing infrastructure. Some portions are in Planning Area 2. The environmentally-sensitive lands and parklands have been addressed by correlating these with the corresponding Planning Areas.

STATE DEVELOPMENT AND REDEVELOPMENT PLANS

The State of New Jersey has recently published the Delta III Map, which highlights the planning areas of Bridgewater Township. For the most part, the corridor of Route 22 and portions Route 202-206, particularly within the Regional Center, and, in some cases, areas that go beyond the regional center, are characterized as Planning Area 1. Planning Area 2 is found in some areas of the Regional Center just outside the Planning Area 1 designation. There are many areas that exhibit historic and environmentally critical zones, which are typically found for historic sites, steep slopes, wetlands, and other similar environmentally sensitive features. This map is the basis of Cross-Acceptance III, which process commenced in the late summer of 2004.

POLICIES

The State Development and Redevelopment Plan includes policies which provide recommendations to implement the goals. Coupled with the Regional Center Strategic and Master Plan, this Master Plan amendment advances many of these policies.

The Master Plan Amendment fulfills the goals of Statewide Policy #2, Comprehensive Planning, in being fully integrated with the Master Plan Updates for the adjacent municipalities of Raritan and Somerville, and in contributing to the Regional Center Strategic Plan, which creates a single coherent vision for the entire Center.

Additional Statewide Policies which are tangibly advanced by this Plan Update include:

#3 Public Investment Priorities: This Plan recommends that public resources be used to upgrade infrastructure to maintain and enhance the value and quality of life of existing developed neighborhoods within a designated Center.

#8 Transportation: This Plan recommends transportation investments that improve access to the regional transit system.

#11 Water Resources: This Plan seeks to protect the Raritan River and its tributaries through the designation of greenways along stream corridors.

#12 Open Lands and Natural Systems: By providing connecting corridors throughout the region, the proposed Raritan River Greenway will protect environmentally sensitive areas and provide expanded habitat for a variety of species.

#14 Waste Management, Recycling, and Brownfields: This Plan promotes the cleanup and reuse of the American Cyanamid site, an existing Brownfield site within the Township.

#19 Design. This Plan promotes the addition of environmental design features to the Bridgewater Core which will improve the environment for pedestrians. It also proposes planning initiatives in established Bridgewater neighborhoods which will identify community design improvements to maintain and enhance the quality of life of those areas.

Associated with the principles of sound design is the consideration of Transfer Development Rights (TDR). It is believed that this mechanism may aid in preserving lands for eventual public enjoyment. As such, the Council should evaluate this concept and implement noteworthy transfers if the benefits to the public are significant.

COMMUNITIES SURROUNDING THE TOWNSHIP

In addition to the Regional Center municipalities of Somerville and Raritan, Bridgewater Township borders nine municipalities. Bodies of water separate Bridgewater from surrounding municipalities. Unless otherwise noted, implementation of this plan would not significantly affect the municipalities abutting Bridgewater Township.

Branchburg Township

Branchburg Township is located in the westerly portion of Bridgewater Township from the jurisdiction of Hillsborough Township to the location noted above where Bedminster Township is found at the Snerowski farm. This farm is bisected by the jurisdictions of Bedminster Township and Bridgewater Township. This is also the location where Branchburg Township converges with these two municipalities. The jurisdiction between Branchburg and Bridgewater is defined by the North Branch of the Raritan River. Along this river are large areas of flood plain and parklands which lie on both sides of the river. Features that are along this border include the North Branch Cemetery Association off of Vanderveer Avenue in Branchburg, The Printmaker Council in North

Branch Greenway Park in both Branchburg and Bridgewater, the North Branch Park with Somerset County Park Commission Headquarters, located in Bridgewater Township, as well as the Confluence Reservoir, which is a significant reservoir located in Branchburg Township as well as Bridgewater Township, and the Chipman Tract, which is located in Bridgewater Township opposite the Confluence Reservoir of Branchburg. There are no policies and objectives which are inconsistent along this common border. The hamlet of North Branch is also located in this area. Within Bridgewater Township, greenway projects proposed along the North Branch of the Raritan River will complement the adjacent land uses in Branchburg.

The low-intensity office campus development proposed for the C-3 zone in the Route 22 corridor in Bridgewater will be compatible with the North Branch greenway and adjacent nature preserve in Branchburg by retaining the existing naturalistic environment of the area. The R-40 PURD zone on the south side of the Route 22 corridor permits low-density residential development. Much of this zone has been built out and additional development in the zone will be limited by environmental constraints.

It is recommended that gateway treatments be applied to the Route 22 border with Branchburg Township. Travelers using this corridor should be made aware that they are entering Bridgewater Township. Signage and design treatments on the reconstructed Route 22 can provide an effective and attractive gateway.

Borough of Manville

On its southeast, Bridgewater borders the Borough of Manville, a historic town which has experienced extensive redevelopment since the floods caused by Hurricane Floyd in 1999. The Raritan River and its floodplains separate Bridgewater from an established residential district and a former industrial area. Inter-municipal impacts are limited here by the necessity of preserving a wide floodplain. However, redevelopment both in Manville and in Bound Brook will likely generate increased traffic on Finderne Avenue. Signage and design treatments should be applied to this boundary to inform travelers that they are entering Bridgewater Township.

Franklin Township

The Raritan River separates Bridgewater Township from Franklin Township on the southeast. This area of Bridgewater will remain undeveloped, as it is subject to severe environmental constraints and is separated from the rest of Bridgewater Township by a rail corridor. The Raritan River Greenway proposed for this area of Bridgewater will enhance the environmental values of the river throughout the region.

Borough of Bound Brook

Like Manville, the Borough of Bound Brook is a historic community which was severely impacted by flooding associated with Hurricane Floyd. Bound Brook, which borders the Finderne section of Bridgewater on the east, has also proposed extensive redevelopment since the flooding occurred. The Middle Brook and Route 287 provide a sharp edge separating Bound Brook from Bridgewater.

Most of Bound Brook's border with Bridgewater consists of well-established residential development. Bound Brook's Redevelopment Vision Plan proposes a greenway park along The Middle Brook, which coordinates with the Regional Center vision of a Raritan Greenway along the river and several of its tributaries. As part of the redevelopment efforts, the Middlebrook Shopping Center has been constructed in Bound Brook near the Bridgewater border on Route 28. Increased traffic from this project, which is in Bound Brook's Regional Business Zone, and other redevelopment projects in Bound Brook's Central Business District, will continue to impact the Finderne section of Bridgewater. At the same time, redevelopment proposals in Finderne will continue to impact Bound Brook.

As with the Branchburg boundary, signage and design treatments on Route 28 can help to establish gateways for both Bridgewater and Bound Brook. In particular, appropriate design treatments should be considered for the Route 287 underpass which is likely to experience an increase in pedestrian traffic as the Bridgewater train station area is developed.

Hillsborough Township

A small portion of Bridgewater borders Hillsborough Township on the south. The Raritan River forms the boundary between the two townships. This area, proposed for a portion of the Raritan Greenway in Bridgewater, is zoned Agricultural in Hillsborough, and is subject to environmental constraints on both sides of the border. No cross-border impacts are expected from the policies of either township.

Bedminster Township

A small portion of the northerly section of Bridgewater Township lies along the jurisdictional line of Bedminster Township. This line follows Chambers Brook to a location north of Route 78. The small village of Pluckemin lies wholly within Bedminster Township. This is a commercial and office center. Abutting Bedminster Township on the west are residential neighborhoods. In the area of Pluckemin is found the village setting, and to the east, along Washington Valley Road, is found portions of "The Hills", which is a multi-family townhouse and condominium project. There are no cross-border impacts anticipated from the policies in either township.

Bernards Township

Along the second ridge of the Watchung Mountains lies Bernards Township, which comprises a good deal of the northerly portion of Bridgewater Township. As a general comment, the Bernards Township jurisdictional line begins at the approximate ridge line of the second Watchung. Uses common to both Bridgewater and Bernards are large lot single family dwellings. Due to the environmental characteristics of the Watchung Mountains, both communities have ordinances in place which are intended to protect this environmentally sensitive slopes. There are no anticipated policies of disconnect between these two communities.

Warren Township

Along the common line with Warren Township is also found primarily single-family residential communities. As with Bernards Township, Warren Township has a policy of preservation in areas which exhibit steep slopes. There are no anticipated changes in the policies of this plan which would negatively impact on Warren Township.

Green Brook Township

Primary access into Green Brook Township is along the major corridor of Route 22. This general area is commercial along the highway corridor, and typically residential to the north and

residential uses to the south. As with Bridgewater Township, this area of the corridor is viewed as highly active. There are no policies that would detract from the policies and objectives of Green Brook.

Middlesex Borough

Along the southeasterly border of Bridgewater Township is a coincidental jurisdictional line with Middlesex Borough. This is an area that wraps around the Borough of Bound Brook and is defined as to boundary by the Green Brook. This finger-like projection, which is sandwiched between Bound Brook Borough and Middlesex Borough, is primarily residential in nature. This is consistent with the residential character of Bound Brook. It also should be noted that there is a large Mount Laurel project just south of Route 22 that abuts Bound Brook; however, neither of these characteristics impact the goals, objectives, or zoning of Middlesex Borough. It is noted that the Green Brook Flood Control Commission is currently installing a levee system, which will provide a significant physical edge between Bridgewater Township and Middlesex Borough.

South Bound Brook Borough

A very small portion of Bridgewater Township touches the most northwesterly corner of South Bound Brook Borough. Since there is the intervening feature of the Raritan River, there is not considered to be any aspects of the policies and objectives of this plan which would have an effect on the Borough of South Bound Brook.

COMMUNITIES WITHIN THE REGIONAL CENTER

This Master Plan Amendment is consistent with the Regional Center Strategic Plan for Bridgewater, Somerville, and Raritan. The Goals and Recommendations included in this document support the broader Goals and Recommendations of the Strategic Plan.

The Regional Center Strategic Plan (RCSP), of which this Master Plan Amendment is incorporated by reference, provides a coordinated framework for planning for its three constituent municipalities. The recommendations in the Regional Center Strategic Plan are based on three years of meetings and discussions, beginning with the Somerset County Regional Center Vision Initiative in 1999. Though the RCSP includes recommendations that apply specifically to Bridgewater, its recommendations transcend a purely local focus in that they reflect not only the existing and future conditions within Bridgewater, but also those within Somerville and Raritan.

As a result of the process leading to its completion, recommendations herein are based on a recognition of the connections between policies of Bridgewater and those recommended for Raritan and Somerville, and vice versa. For example, it proposes a greenway system that traverses the entire Regional Center. It does not recommend densification in the Bridgewater Commercial Core because the Central Business Districts of Somerville and Raritan can more appropriately fill the role of "Downtown" for the Regional Center. In addition, The Bridgewater Commons fills the commercial draw of a Regional Center. Because each element recognizes the relationship between existing and future conditions in Bridgewater and those in Somerville and Raritan, there is no need to address separately the relationship between this Plan and those of Somerville and Raritan.

GLOSSARY OF TERMS

Group Homes: The term "group home" means and includes any single family dwelling used in the placement of children pursuant to law recognized as a group home by the Department of Institutions and Agencies in accordance with rules and regulations adopted by the Commissioner of Institutions and Agencies provided, however, that no group home shall contain more than 12 children.

Infill: The development of new housing or other uses on scattered sites in a built-up area.

Neighborhood Plan: The master or specific design plan for a particular neighborhood or district that provides recommended standards and guidelines for future land use and development, open space and recreation areas, streets and circulation, and community facilities.

Target Revitalization Areas: Areas that have been studied and deemed to be particularly in need of significant improvements that are necessary to upgrade the area.