TOWNSHIP OF BRIDGEWATER

MASTER PLAN

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With special gratitude to the former Township Planner, Scarlett Doyle, for her immeasurable contributions to this Comprehensive Master Plan and many years of service to Bridgewater Township

September 18, 2025

The original of this report was signed and sealed in accordance with N.J.S.A. 45:14A-12.

Katherine Sarmad, AICP, PP
#33LI00634300

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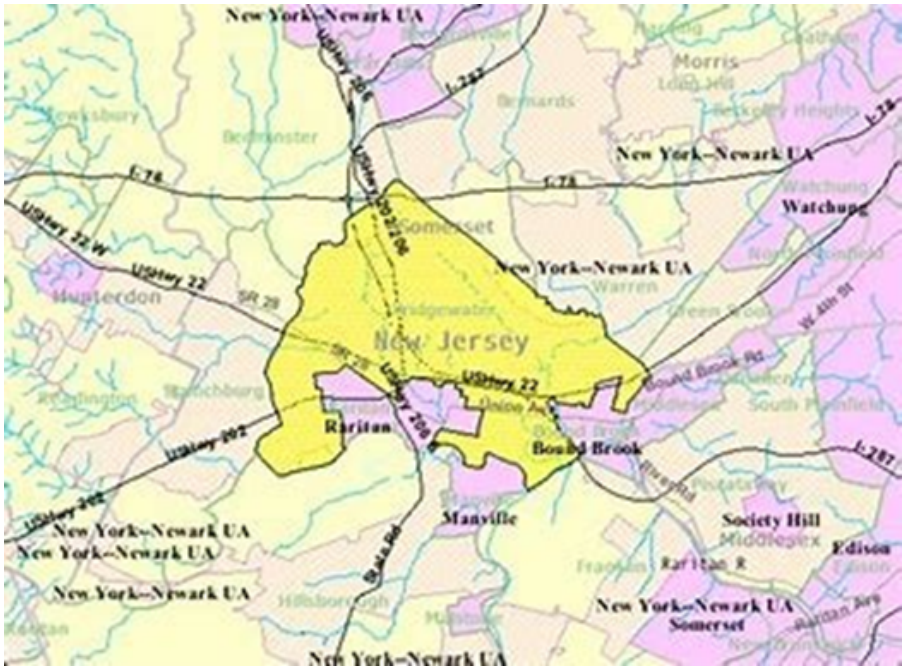
PART 1

REGIONAL SETTING AND PRIOR MASTER PLANS

1.1 REGIONAL SETTING

Bridgewater Township is located in Somerset County, New Jersey, United States. The Township is both a regional hub for Central New Jersey and also known as a major bedroom suburb of New York City in the much larger New York Metropolitan Area, located within the heart of the Raritan Valley region. According to the United States Census Bureau, the Township had a total area of 32.36 square miles, including 31.89 square miles of land (98.54%) and 0.47 square miles of water (1.46%).



As of the 2020 United States Census, the Township's residential population was 45,977, reflecting an increase of 1,513 (+3.4%) from the 44,464 as counted in the 2010 Census, which had in turn increased by 1,524 (+3.5%) from the 42,940 counted in the 2020 Census. As of the 2022 Population Estimates Program census estimate, the Township's population was 46,318, a slight up-tick from 2020. There are three zip codes that cover Bridgewater. The principal Zip code is 08807, the Martinsville Zip code is 08836 and the Bound Brook Zip code is 08805, which are utilized in collecting census data.

Bridgewater Township was created by Royal charter on April 4, 1749, from portions of the Northern precinct. It was incorporated as one of New Jersey's initial group of 104 Townships by the New Jersey Legislature on February 21, 1798, under the Township Act of 1798. During the nineteenth century, portions of the Township were taken to form Warren Township (March 5, 1806), Branchburg Township (April 5, 1845), Somerville (March 25, 1863), Raritan (April 3, 1868) and Bound Brook (March 24, 1869).

Bridgewater is a relatively large, suburban Township located in the center of Somerset County. The area of the present Township of Bridgewater was originally purchased from the local Lenape Native American tribe.

Tradition holds that it was at the Middlebrook encampment that the first official flag of the United States was unfurled, after a law to adopt a national flag had been passed by Congress on June 14, 1777. By special order of Congress, a Thirteen Star Flag is flown 24 hours a day at the Washington Camp Ground, which is part of the former Middlebrook encampment. Since 1889, the first hoisting of the flag is commemorated annually each July 4 with a changing of the flag, a reading of the Declaration of Independence, and the delivery of a historical address.

Until the 1960s, Bridgewater was largely known as a farming community. In the 1970s its population began to grow when residents of larger cities, such as Plainfield and Newark, started to migrate into Bridgewater. Subsequently, Bridgewater started to receive an influx of residents who worked in the strong pharmaceutical, telecommunications, and financial industries in Bridgewater and the Raritan Valley. More recently, there has also been growth as Bridgewater has become more popular with New York City commuters who use the Bridgewater or Somerville Station on New Jersey Transit's Raritan Valley Line or Interstate 78 to commute to New York City. Bridgewater is now fairly developed, with traces of its rural past still evident (particularly in its northwestern section). Bridgewater is now Somerset County's second-most populous municipality, after Franklin Township.

The Raritan River and its branches and tributaries form much of Bridgewater's borders with other municipalities and a number of smaller rivers and streams run through Bridgewater. The Raritan itself runs along Bridgewater's southern border and the North Branch of the Raritan River forms the Township's western border with Branchburg. The North Branch and South Branch of the Raritan River meet at the extreme southwestern corner of Bridgewater at the border with both Branchburg Township and Hillsborough Township, and this point is known as the Raritan River Confluence which was once intended to be a major reservoir.

Bridgewater borders 13 municipalities and has its longest borders with Branchburg Township, Bedminster Township, Bernards Township, Warren Township, Bound Brook Borough, Somerville Borough, and Raritan Borough.

Bridgewater's major highway access includes proximity to US Routes 22, 202, 202/206 and Interstate Routes 287 and 78. This convenient transportation network connects Bridgewater to a larger region which includes New York City, Newark Liberty International Airport, Rutgers University, Princeton University, Port of Elizabeth and various points of historical and cultural interests in New York, New Jersey and Pennsylvania.

1.2 PRIOR MASTER PLANS

The Bridgewater Township Planning Board adopted several Master Plans which were incrementally developed to, among many things, maintain and strengthen its quiet suburban, single-family identity as well as its corporate appeal. The discussion and recommendations contained in this Master Plan are based upon the review of several Master Plans and Periodic Reexamination Reports adopted over the course of several years.

1. Master Plan, dated 1990 provides a vision for the Township, citing valued policies and objectives.

2. Master Plan Amendment and Reexamination Report, dated February 28, 2005 addresses policies and development strategies intended to serve as a basis for focused study in an effort to preserve the goals outlined in the 1990 Master Plan and to further enhance the quality of life in the Township.

3. Master Plan Amendment and Reexamination Report, dated November 11, 2008 deals with impervious coverage and floor area ratio standards to maintain the established scale within several zoning districts.

4. Master Plan Amendment of the Recreation Element of the Master Plan adopted on May 24, 2010 sets forth a plan for passive and active recreation facilities on public lands.

5. Master Plan Amendment and Reexamination Report-Circulation Element, dated September 2010 studied traffic circulation and modes of transportation throughout the Township.

6. Master Plan Amendment to the Land Use Element dated March 27, 2015 studied a portion of the Route 202 corridor and recommended rezoning a portion in the westerly portion of the Township. The C-7 zone was created in response to the Master Plan Amendment.

7. A Master Plan Amendment was adopted on December 22, 2015 in response to the governing body's declaration that a portion of Block 483 Lots 17, 18 and 19 was an 'area in need of redevelopment.' A Redevelopment Plan was prepared and submitted to the Township Council by the Planning Board. A Master Plan Amendment, with

Amendment with recommended zoning, was also prepared for the portion of the abutting Tract that was not designated as 'an area in need of redevelopment; and therefore, not included in the Redevelopment Area.

8. Reexamination Report dated December 13, 2016 which provides recommendations regarding reconciling existing development and zoning along the Route 202/206 corridor. In addition, there were recommendations for definitions and improvements on Mountaintop Road among other issues.

9. Reexamination Report dated February 8, 2011 addressed recommendations for places of assembly. Master Plan Reexamination Report, Master Plan Amendment and Redevelopment Plan of December 2, 2014, for redevelopment of underutilized industrial land in the Finderne neighborhood section of the Township.

10. Reexamination Report dated March 27, 2015 recommends study of uses along Township highway corridors within the Township, including Route 202/206. This Master Plan amendment is prepared in response to the specific recommendations offered in the Reexamination Report. Four zoning amendments are proposed for properties which have frontage on Route 202/206.

11. Master Plan Amendment and Reexamination Report-Economic Element, was adopted on April 13, 2010. This study was developed in response to the Master Plan Amendment and Reexamination Report, dated February 28, 2005, where the study was recommended to, "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." Relevant among the goals in the 2010 Master Plan Amendment regarding economic development on the Route 22 corridor are the following which have also been stated in other Master Plans:

a. To preserve the development character and quality of Bridgewater Township.

b. To safeguard the tax base, provide for a continuing employment source and tax ratables through appropriate use of non-residential lands.

c. To encourage the re-development of large industrial tracts which are no longer viable for industrial or manufacturing uses.

d. To limit the development of any additional multi-family housing, unless included in the Township's Housing Element and Fair Share Plan or within Redevelopment Plans that permit residential uses.

e. Reconcile the difference between the existing pattern of development and existing zoning. Assess appropriate zoning on vacant and underutilized parcels in order to determine consistency with the Township "vision."

12. Master Plan Amendment and Reexamination Report adopted in February, 2022. Amendments include elimination of the Active Adult Residential zone (AAR), rezoning areas along Union Avenue, Recommendations for craft brewery permitted uses and clarifications in Definitions.

13. Master Plan Amendment and Reexamination Report dated September 13, 2022 which deals with the Township's Affordable housing stock.

14. Master Plan Amendment and Reexamination Report dated October 17, 2022 that deals with controls for Warehouse uses in the Township.

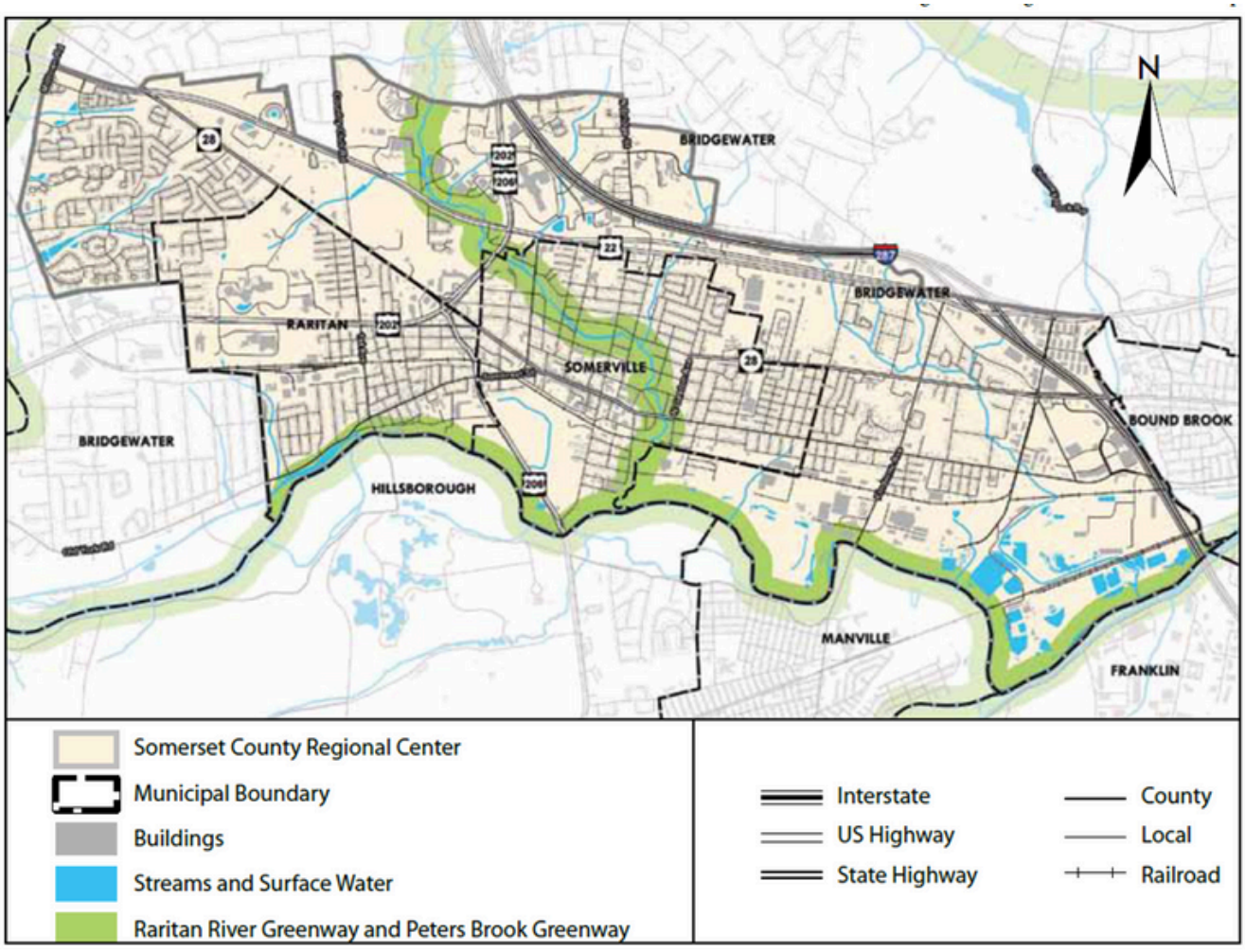
15. Master Plan and Reexamination Report dated September 13, 2022 that deals with Affordable Housing.

16. Master Plan and Reexamination Report dated September 27, 2022 that deals with zoning on municipal property in the vicinity of the Commons Mall.

17. Master Plan and Reexamination Report dated October 17, 2022 that deals with warehouse uses.

1.3 SOMERSET COUNTY AND REGIONAL CENTER PARTICIPATION

In May of 1996, in accordance with the State Planning Rules, N.J.A.C. 17:32-8.6(a), the New Jersey State Planning Commission designated the Boroughs of Raritan and Somerville and a portion of Bridgewater Township as an official Regional Center. The Regional Center is a 14.2 square mile area which is located generally along Route 22 and U.S. Highways 202 and 202/206.



The Regional Center is defined by the New Jersey State Development and Redevelopment Plan as the focal point for the economic, and cultural activities of the Somerset County planning region, a compact, mixed-use core and wide ranges of neighborhood sections offering a variety of housing opportunities.

1.3.A THE REGIONAL CENTER STRATEGIC PLAN

The goals and strategies noted in the Somerset County Regional Center Strategic Master Plan serve to bolster the concept of reimagining uses which are closely aligned to the current realities of the Regional Center.

1.3.B GOALS OF THE REGIONAL CENTER (AS ENDORSED BY BRIDGEWATER TOWNSHIP)

1. Endorse and support RWJ Barnabas Health's Community Health Needs Assessment and Implementation Plans and Healthier Somerset's Community Health Improvement Plan (CHIP). This can help address some of the mental health issues which, in some respects, may be attributable or exacerbated by social isolation. A goal of the Regional Center is to break down social isolation by making vibrant connections between our residents and the amenities that the Regional Center offers.

2. Explore options to implement a bike sharing program between Regional Center partners.

3. Support the creation of more public plazas or pop-up parks where the public may enjoy fresh air, physical activity, and social interaction to help abate health issues such as rising rates of chronic disease and an increased prevalence of sedentary lifestyles.

4. Actively support the availability of farmer's markets and farm-to-table /local food sourced opportunities.

5. Continue to support the implementation of Complete Street policies in all three Regional Center towns.

6. Ensure that all routes to schools are pedestrian friendly and have enhanced crosswalks and signs.

7. Identify all truck routes in the Regional Center to avoid schools and other high pedestrian areas.

8. Support countywide efforts by the County OEM to develop disaster response and recovery plans.

9. Provide updates to the County Hazard Mitigation Plan.

10. Provide resources to encourage local businesses to develop continuity plans (because of economic downturn or after natural disasters).

11. Support implementation of strategies as now required in the Municipal Land Use Law. Per recently adopted legislation (July, 2021) requiring municipal master plans to include strategies concerning smart growth, including potential locations for the installation of electric vehicle charging stations; storm resiliency with respect to energy supply, flood-prone areas, and environmental infrastructure; and environmental sustainability are goals to be sought after.

12. Develop a list of "green" infrastructure strategies to be used in physical improvements such as storm water management techniques.

13. Revise and update the Regional Center Pedestrian, Bicycle, and Greenways System Connection Plan.

14. Continue to support completion of the Raritan River Greenway.

15. Design and build the Raritan River Greenway connection to Duke Farms.

16. Continue to work in conjunction with the Rutgers Sustainable Raritan River Initiative to promote public access to the river for trail use, fishing, and watercraft recreation.

17. Support coordinating park and recreational opportunities among the three Regional Center municipalities and with Somerset County as a whole.

18. Encourage green infrastructure planning in municipal, county, and privately owned parklands.

19. Identify opportunities for outdoor seating at downtown restaurants through wider sidewalks, curb bump-outs, and pop-up seating.

20. Support creative placemaking efforts such as community supported public art projects to attract visitors who will want to return and further patronize local businesses.

21. Support and assist an economic development entity to focus on economic vitality in downtown Raritan.

22. Support efforts to enable bus and rail riders to download or receive current "real time" train and bus arrival times to make service more user friendly.

23. Communicate to the Regional Center communities the importance of new Trans-Hudson rail capacity.

24. Support efforts to accommodate more bicycle commuting to train stations such as the implementation of a bike depot.

25. Support efforts to address better traffic flow along Route 202; e.g., adjusting the Route 202/Ortho Drive signal timing; support intersection improvements at Route 202/First Avenue.

26. The Master Plan Amendment of 2010 includes discussion of the Somerset County Regional Center. Applicable goals, objectives and recommendations of the Regional Center are to: Reconcile the difference between the existing pattern of development and existing zoning and to assess appropriate zoning on vacant and underutilized parcels in order to determine consistency with the Township "vision" Bridgewater Regional Center Core.

The Bridgewater Regional Center Core is the commercial center of the Township and is intended to function as a local and regional destination for shopping, services, and employment. The following is a summary of applicable recommendations made for the Core:

- Develop diversity in permitted uses to promote the Core as the Township Center and a commercial destination of regional significance.
- From a planning perspective, campus style office development remains appropriate given the existing land use pattern, highway access and the relatively low intensity character of the corridor.
- Provide a balanced land use pattern in the Township of residential, commercial, industrial, public/semi-public, conservation and parks/open space uses that supports residential neighborhoods, maintains and strengthens existing commercial districts, preserves some remaining industrial areas, increases parks, recreation and open space, protects environmentally sensitive natural features, accommodates community facilities and facilitates local/regional circulation without placing undue demands on infrastructure including roads.

1.3.C RECOMMENDATION FOR THE REGIONAL CENTER

As a partner in the Regional Center, Bridgewater endorses the premise that all communities participating in the Regional Center bring unique and positive aspects that could benefit the whole partnership. Bridgewater has the asset of many hotels that serve the corporate community as well as the traveling public

With regard to minimum setback requirements for Route 202, the current ordinance requires a setback of 200 feet to the east of the Somerville circle. It is recommended that the entire length of Route 202, including the frontages to the west of the Somerville circle, have the same minimum front yard setback of 200 feet. This will require ordinance amendment.

Bridgewater Township endorses the Finderne Neighborhood Plan and recommends use of Plan in the Regional Center Partner planning process.

It is suggested that the Regional Center undertake outreach with hotel partners and local businesses to highlight the vitality of the Regional Center including the living and working opportunities offered in each community. The outreach could include a televised video segment showing 'things to do' around the Regional Center, such as showing clips of the many county and municipal parks, hiking and biking trails, historic sites, shopping opportunities and diverse restaurant options available in all three communities. This is a marketing opportunity that should be explored to share the assets that the Regional Center has to offer.

PART 2

GOALS, POLICIES AND OBJECTIVES

2.1 MUNICIPAL LAND USE LAW GOALS AND OBJECTIVES

The purpose of the Municipal Land Use Law clearly identifies the objectives in 40:55D-2. The Municipal Land Use Law provides the enabling legislation for the Township to implement its specific local goals. Bridgewater fully endorses the Purposes of the MLUL.

The Purposes of the Municipal Land Use Law are as follows:

a. Encourage municipal action to guide the appropriate use or development of all lands in this State, in a manner which will promote the public health, safety, morals and general welfare;

b. To secure from fire, flood, panic and other natural and manmade disasters;

c. To provide adequate light, air and open space;

d. To ensure that the development of individual municipalities does not conflict with development and general welfare of neighboring municipalities, the County and the State as a whole;

e. To promote the establishment of appropriate population densities and concentrations that will contribute to the well-being of persons neighborhood sections, communities and regions and preservation of the environment;

f. To encourage the appropriate and efficient expenditure of public funds by the coordination of public development with land use policies;

g. To provide sufficient space in appropriate locations for a variety of agricultural, residential, recreational, commercial and industrial uses and open space, both public and private, according to their respective environmental requirements in order to meet the needs of all New Jersey citizens.

h. To encourage the location and design of transportation routes, which will

promote the free flow of traffic while discouraging location of such facilities and routes which result in congestion or blight.

i. To promote a designable visual environment through creative development techniques and good civic design and arrangement'

j. To promote conservation of historic sites and districts, open space, energy resources and valuable natural resources in the State and to prevent urban sprawl and degradation of the environment through improper use of land.

k. To encourage planned unit developments, which incorporate the best features of design and relate the type, design and layout of residential, commercial, industrial and recreational development of the particular site;

l. To plan for housing opportunities that meet the needs of changing residential demographics;

m. To encourage coordination of the various public and private procedures and activities shaping land development with a view of lessening the cost of such development and to the more efficient use of land;

n. To promote utilization of renewable energy sources;

o. To promote the maximum practicable recovery and recycling of recyclable materials from municipal solid waste through the use of planning practices designed to incorporate the State Recycling Plan goals and to compliment municipal recycling programs.

2.2 BRIDGEWATER POLICIES AND VISION

As an overarching policy, the Township endorses the statement that, "the Township should control development, limit density, protect, enhance and acquire open space and actively pursue opportunities to enhance the health, safety and quality of life for Bridgewater's residents and visitors". The following policies will help to further that goal:

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. Bridgewater seeks to protect established neighborhoods, address quality of life issues, promote a diversity of housing choices that are compatible with existing neighborhood characteristics, and provide for compatible in-fill housing where appropriate. (In-fill development is development of vacant lands which meet the zoning regulations of the Township.)

E. The Township should prepare a Housing Element and Fair Share Plan, and associated zoning ordinances, that minimizes impacts on surrounding neighborhoods and municipal services; remains in character with the Township development; while creating affordable housing opportunities.

F. Continue to monitor and address court mandated fair share/affordable housing obligations and, in doing so, advocate for the use of Bridgewater's land use principles whenever possible. Bridgewater desires to ensure that future obligations do not negatively effect the Suburban character of its neighborhoods.

G. Encourage appropriate development of land use focus areas in the Township that will, within the limits of zoning, generate economic development activity, diversify the municipal economic base, create new employment opportunities, and strengthen the tax base, or encourage open space and passive recreation.

H. 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 connectivity, where feasible, balanced intermodal access, and streetscape improvements to create a sense of place and enhance community design.

I. Enhance 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.

J. Encourage the retention of existing light industrial and high technology uses with an emphasis on corporate 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

K. Actively promote land conservation and stewardship of the various options for public open space planning as a means of shaping development patterns, protecting environmentally-sensitive critical steep slope areas, and facilitating the potential for a greenbelt where open space has been acquired through and around the Township.

L. Pursue public-private partnerships to protect, enhance and acquire open space and recreational areas within the Township.

M. 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.

N. 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 Regional Center Master Plan, which is incorporated by reference.

O. 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.

P. Require aesthetically pleasing land use design with subtle character in site appearance and landscaped buffering, including along major corridor routes.

Q. 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. These plans should address major planning, zoning, and design issues; as well as incorporate permitted land uses, bulk standards, potential in-fill development locations, community design and architecture and public improvements such as parking and streetscape upgrades.

R. High rise residential buildings are not in keeping with the subtle suburban image Bridgewater wishes to promote. Therefore, it is recommended that building and floor to ceiling 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 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 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,pedestrian network, and connect to open space outside the Regional Center, where feasible.

F. Undertake neighborhood-based planning initiatives to address parks, recreation, and open space needs.

G. 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, where practical.

H. Establish pedestrian linkages between schools, community facilities, neighborhood areas, and downtown commercial cores, and park lands.

I. Encourage community volunteerism as a force to maintain and improve existing parks and open space.

Circulation

A. Ensure that the transportation service stops and stations 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.

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. Evaluate and control the appropriate speed limit on streets by applying Enforcement, Education and sound Engineering design for traffic calming strategies.

E. Plan for major uses and their access to utilize roadway classifications that meet the largest volumes for traffic (i.e., the arterials and major collectors). These uses should not access roadways that go through residential neighborhoods.

F. Work with public and private partners to create transportation options, which would provide linkages to places of interest. A focus should be placed on transportation for senior citizens.

G. Evaluate and update the classification of the Regional Center's system of roadways and streets and identify, implement, and advocate for capital improvements and regulatory mechanisms needed to meet existing and future needs.

H. Implement the comprehensive plan for accommodating travel by bicycling and walking throughout Bridgewater Township; while increasing public awareness of these opportunities.

I. Develop and implement actions that enhance public transit opportunities, in appropriate locations, for Bridgewater Township.

J. Study truck traffic on local roadways and consider weight restrictions where

appropriate.

K. Develop a mechanism for tracking progress towards the achievement of Township transportation goals.

Sidewalks

A. Bridgewater Township should promote sidewalks, where appropriate, in all residential and commercial developments, including Redevelopment Projects. Appropriateness can be determined by factors including, but not limited to, existing/historic character of neighborhoods, proximity to critical facilities (i.e. schools, parks, emergency services, libraries, local business districts, houses of worship, etc.) and connections to existing sidewalk networks.

Community Facilities

A. Provide community facilities to the residents and businesses of Bridgewater.

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

C. Ensure that development applications do not negatively impact municipal facilities.

D. Thoroughly study existing municipal facilities to ensure that they meet community needs.

2.3 BRIDGEWATER GOALS AND OBJECTIVES

Bridgewater Township has a solid set of goals which include its dedicated purpose to preserve and protect the character of the Township and to promote a sustainable future for its residents. This Master Plan also endorses portions of the Somerset County Regional Center Element. The Township has endorsed the following goals:

1. With preservation of character as a priority, Bridgewater seeks to preserve the overall quiet nature and quality of life that the Township holds dear.

2. Provide a balanced land use pattern in the Township of residential, commercial, industrial, public/semi-public, conservation and parks/open space uses that supports residential neighborhoods, maintains and strengthens existing commercial districts, preserves some remaining industrial areas, increases parks, recreation and open space, protects environmentally sensitive natural features, accommodates community facilities and facilitates local/regional circulation without placing undue demands on infrastructure including roads.

3. Reconcile the difference between the existing pattern of development and existing zoning. Assess appropriate zoning on vacant and underutilized parcels in order to determine consistency with the Township “vision.”

4. Maintaining the community character by carefully managing the density, housing type, residential scale and commercial scale in order to continue to control population densities and enhance the overall quality of life. At the same time, strategies should not promote dramatic changes which would lead to the sense of congestion and significantly alter the existing lifestyle balance within the Township.

5. Protecting natural features, waterways and ground water in an effort to protect against degradation of the environment. Assure the reduction or elimination of topsoil loss, soil erosion and above and below-ground pollutant transport.

6. Creating a community with attractive surroundings by enhancing parks, open spaces, that collectively give Bridgewater its special character.

7. Maintaining a circulation system that provides convenient roadway and open space linkages. Offer meaningful off-road and on-road pedestrian and bicycle paths for personal enjoyment.

8. Evaluating and implementing zoning amendments from time-to-time to assure a sustainable land use and offer a reliable identity for Bridgewater Township.

9. To preserve the development character and quality of Bridgewater Township, design standards should be implemented. The objective of building design standards is to provide overall high quality and complementary design of buildings along corridors which receive the most visual attention of motorists and others. The exterior appearances of buildings shall complement the overall development character and quality of Bridgewater Township. In keeping with some of the recommendations in the 2005 Master plan, it is suggested that the Township begin to adopt standards for architectural design controls.

10. To limit the development of any additional high-density multi-family housing developments unless such are included in the Township's Housing Element and Fair Share Plan, or are dedicated for senior housing or veterans housing that provide affordable housing units.

11. Cooperate with the concept of the Regional Center. As a partner with the other two members of the Regional Center, Bridgewater endorses the premise that the assets of the whole (Regional Center) exceed the assets of the individual members (Bridgewater, Somerville and Raritan.) Land use decisions can therefore include considering the unique assets available in the partnering communities of Somerville and Raritan Boroughs.

12. To update the land use plan to address areas where the circumstances of land use are in transition. The focus is to affirmatively respond to transition conditions without injuring the well-established fabric of the existing uses and neighborhoods in the Township.

13. To protect the quality of surface and sub-surface waters through strong stormwater management regulations.

14. To discourage highway non-residential development design treatments that

may intrude into the privacy of adjoining residential neighborhood sections. This includes uses, holding tight to buffers, low building height, extinguish exterior and interior lighting at the close of business, trash pickup beginning after 8 am, outside activity areas not intrusive onto the abutting residential dwellings, parking areas screened from neighbors and low signage.

15. Encourage connectivity improvements between activity nodes for bike and pedestrian activities.

16. To manage safe and convenient access roadways in cooperation with State and County agencies.

17. To acknowledge that public roadways deserve strong aesthetic design considerations which may also include a sidewalk network that encourages pedestrian usage for its residents.

18. To provide a wide range of opportunities for active and passive recreation throughout all sections of the Township.

19. Create linkage paths between public areas through the use of pedestrian paths, bikeways, and blue ways (a designated route on a waterway for recreational use, such as paddling, kayaking, or canoeing).

20. Work cooperatively with the County or other regional and state agencies to encourage conservation of the forest areas on the slopes and ridges of the mountain through acquisition of easements and fee simple ownership.

21. Provide regulations that require public or private open spaces for conservation or passive or active recreation for major development applications.

22. Discourage development that will place a strain on the free flow of traffic within neighborhood sections of the Township, without having commercial trucking intrude on residential neighborhoods.

23. Consider public policies that would preserve historic resources.

24. Design development guidelines to assure that development architecture is visually compatible with the established neighborhood sections of the Township in which it lies.

25. Study and plan for the expansion of community facilities and recreational uses that are, or will be needed, for the benefit of the current and future residents.

26. Develop a strategy to secure a fair share contribution to implement off-tract improvements that would be levied on development projects.

27. To study and adopt land use regulations that address matters that will improve living in Bridgewater Township, making it the most pleasant place in the state to live and work.

28. To visually improve major corridor locations to enhance the image of the community and strengthen its identity.

29. To adjust to the contemporary needs of Bridgewater residents and businesses while assuring the integrity of the small-suburban type character of Bridgewater.

30. Ensure that new development (including retrofitting of existing properties) includes appropriate lighting landscaping, street furniture, sidewalks and access to mass transit.

31. Establish gateways and coordinated design focal points in the Regional Center.

32. Promote coordinated and uniform design standards in key neighborhood sections.

33. Pursue commercial development to attract tax ratables and reduce the residential tax burden. Strengthen the predictability of the business development process to encourage investment in the area.

2.4 THE PUBLIC PROCESS

Bridgewater Township created a public outreach and community engagement strategy plan for the Master Plan, beginning in 2023. Early in the Master Plan process stages, the Township published weekly, informational videos about each of the various Master Plan Elements on the Township website. The Township also established an Ad Hoc subcommittee, consisting of members of the administration, Planning and Zoning Board members, and consulting professionals. In 2024, the Township hosted a publicly noticed community forum in the municipal building, which allowed attendees to learn more about each of the Master Plan Elements at "stations" set up around the room. Attendees were invited to leave comments on the poster boards set up at each station, with the goal to collect feedback and recommendations related to the specific topic areas.

This was also done separately for the Township's Open Space and Recreation Plan Element of the Master Plan, which was a simultaneous and ongoing effort in 2024. That Plan is being prepared separately from the Comprehensive Master Plan.

2.4.A OUTLINE OF COMMUNITY OUTREACH

The Township formed an Ad Hoc Committee in May of 2023. This committee met weekly/bi-weekly depending on schedules, and went through the previous iteration of the Master Plan page by page, compiling notes, edits, thoughts, and questions for professionals.

While the Ad Hoc committee worked month after month, the Township completed a public information campaign/educational video series that kicked off ahead of getting public feedback. These videos were aimed at providing the public with the background and information about the Master Plan that would provide the foundation for their questions and feedback.

The video series included the following:

- Master Plan Introduction Video with Mayor Moench – August 14, 2023
- Master Plan Element 1: Objectives and Principles – August 21, 2023
- Master Plan Element 2: Land Use – August 28, 2023
- Master Plan Element 3: Conservation – September 11, 2023
- Master Plan Element 4: Circulation – September 25, 2023
- Master Plan Video Element 5: Housing – October 2, 2023
- Master Plan Element 6: Water and Sewer – October 9, 2023
- Master Plan Element 8: Community Facilities – October 23, 2023
- Master Plan Element 9: Other Elements – October 30, 2023

Upon completion of the final video of the educational video series, the Township published an online survey for public feedback, which was kept open for the months of November and December of 2023, and then reopened after the Public Workshop held in May 2024 for an additional month through (June 2024).

The Master Plan Public Workshop was held on May 22, 2024. The event was publicized on social media and in the local newspaper, and was well attended. The online feedback form was re-opened for anyone who could not attend the in-person workshop.

2.5 CONSISTENCY WITH THE STATE DEVELOPMENT AND REDEVELOPMENT PLAN

2.5.A POLICIES AND OBJECTIVES OF THE STATE PLAN

The State of New Jersey has publicized a draft of the State Development and Redevelopment Plan, and has solicited local feedback through Cross Acceptance Response Templates (CARTs) and has conducted public hearings on the State Plan

through mid-2025 with all County negotiating entities. The State Development and Redevelopment Plan (SDRP) includes goals which provide recommendations to implement the goals. This Master Plan Amendment advances many of the State's policies as shown in the SDRP.

The Goals of the updated SDRP are:

1. Promote Economic Growth that Benefits all Residents of New Jersey
2. Provide an Adequate Supply of Housing For Residents of All Ages and Incomes in Communities of Their Choosing That Meet Their Needs and Offer Ready Access to the Full Range of Supportive Goods and Services
3. Economic Opportunity Through nation-leading Infrastructure
4. Revitalize and Recenter the State's Underutilized Developed Areas
5. Effectively Address the Adverse Impacts of Global Climate Change
6. Protect, Maintain, and Restore the State's Natural and Water Resources and Ecosystems
7. Protect the Environment; Prevent and Clean Up Pollution
8. Protect, Enhance, and Improve Access to Areas with Exceptional Archeological, Historic, Cultural, Scenic, Open Space, and Recreational Value
9. Implement Equitable Planning Practices to Promote Thriving Communities for all New Jerseyans
10. Foster Sound and Integrated Planning and Implementation at all Levels Statewide

As outlined in this Master Plan, the Township Goals and Objectives promote the balance of sustainable economic development and to retain high-quality commercial investments with the preservation of natural resources and protection of the community values. The Township continues to strengthen its relationship with its commercial community to assure that Bridgewater is viewed as the finest community in the State of New Jersey. The Township has adopted ordinances to preserve environmentally sensitive areas along stream corridors and intends to explore even more stringent regulations to assure that the conservation effort will be sustainable. Bridgewater has partnered with Somerset County in addressing what must be done to secure lands along streams and the Raritan River in an effort to continue greenway planning. This initiative is ongoing and is gradually achieving the ultimate objective of securing a linear greenway along the Raritan River.

Additionally, the Township will ensure sound, coordinated and integrated statewide planning by using the State Plan as a guide to planning and growth-related decisions at all levels of government in ways that are consistent with the State Plan's vision and goals. The Township will continue participating as an active member of the Regional Center Partnership, which is a sound and coordinated effort for planning and growth-related decisions. The members of the Regional Center meet regularly and collectively plan strategies for integrated planning in concert with the State Development and Redevelopment Plan. Sound, coordinated and integrated planning has ensured a robust and vital Regional Center area.

Section 11 of this Master Plan addresses the environmental threats and vulnerabilities that exist in Bridgewater, along with long-term strategies to protect flood-prone areas and underserved populations in those areas.

The separately-prepared Housing Element and Fair Share Plan Element and the Open Space Element both address the SDRP goals related more specifically to housing and open space.

PART 3

LAND USE PLAN

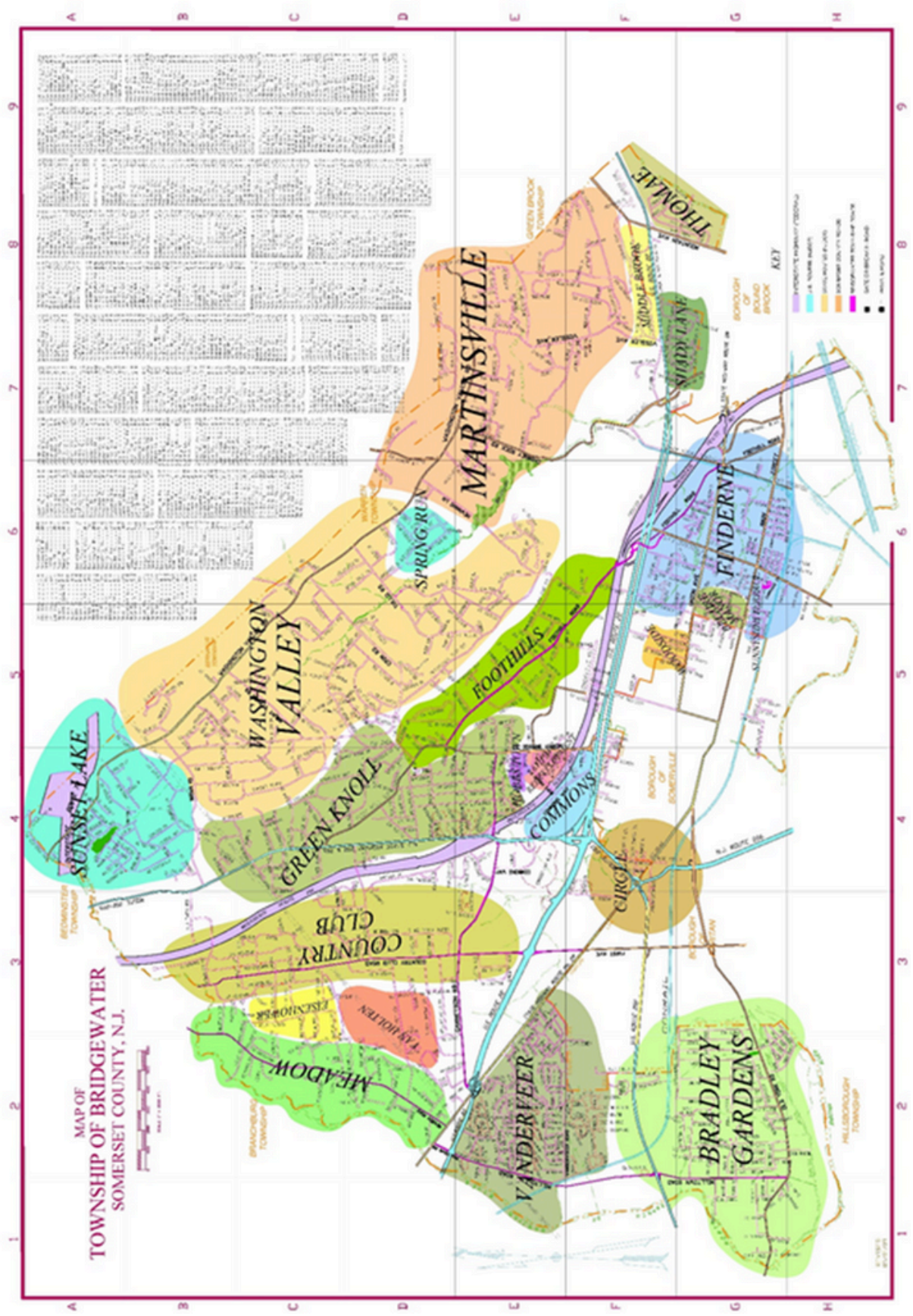
3.1 INTRODUCTION

The Bridgewater Township zoning ordinance was adopted in 1976 by way of Ordinance # 76-40. The Land Use Plan offers the mechanism to adopt ordinance amendments, as envisioned by the Municipal Land Use Law (MLUL). Since the Master Plan responds to the purposes of the MLUL, regulations regarding the purposes are properly embodied in the land management regulations of the Bridgewater Township Land Development Ordinance. As such, the Land Use Plan Element goes a long way to reflect the Township's vision and shapes the landscape of the Township and the associated ordinance regulations for each of the several designated neighborhoods and their environs.

3.2 NEIGHBORHOOD DESIGNATIONS IN BRIDGEWATER TOWNSHIP

Several neighborhood sections have evolved over time and collectively form the complex fabric of Bridgewater Township, each with its distinctive qualities. Some neighborhoods have blended with their abutting neighborhood to the point that some of the distinctions are blurred. The neighborhood map is shown below, with the more prominent and distinct neighborhoods discussed after the mapping.

In this Master Plan, there will be reference to these neighborhoods relative to zoning. Where needed, limits are defined so that regulations can be administered to the applicable areas. The following graphic depicts the neighborhood area boundaries throughout Bridgewater Township.


MAP OF
TOWNSHIP OF BRIDGEWATER
SOMERSET COUNTY, N.J.
MARTINSVILLE
WASHINGTON VALLEY
SUNSET LAKE
GREEN KNOLL
COUNTRY CLUB
MEADOW
VANDERVEER
BRADLEY GARDENS
FINDERNE
FOOTHILLS
COMMONS
CIRCLE
THOMAE
KEY

3.2.A BRADLEY GARDENS NEIGHBORHOOD

Bradley Gardens is located in the southwestern portion of the Township, bordered on the east by Raritan and by Branchburg on the west. This is one of Bridgewater's older residential areas, but includes emerging newer developments. Land uses include highway commercial uses along Old York Road as well as supporting public uses such as a small park, fire house and the Somerset County-owned Duke Island Park. This Neighborhood section of the Township has an elementary school and American Legion Post 327.

Bradley Gardens is experiencing a great deal of residential renovation. Smaller homes are being razed and two-story colonials are taking their place. The reuse of lots for larger homes often prompts the request for side yard setback relief from the Zoning Board of Adjustment.

3.2.B COUNTRY CLUB NEIGHBORHOOD

Country Club borders Bedminster and Branchburg and is sometimes referred to as the Country Club/Meadow Road Neighborhood after the major north-south streets that traverse there. Van Holten elementary school is located in the Country Club neighborhood.

3.2.C THOMAE NEIGHBORHOOD

Thomae Park is located in the extreme eastern portion of the Township, bordering Bound Brook and Middlesex Boroughs. Residents in Thomae Park have a Bound Brook zip code. One amenity in this area is Thomae Park which has playground equipment, a basketball court, baseball field and hiking trail.

3.2.D VANDERVEER NEIGHBORHOOD

The Vanderveer Neighborhood is sometimes referred to as the Milltown-Vanderveer area. The area is northeast of Bradley Gardens and borders Raritan and Branchburg. This is mainly a residential community with new homes, some of which are affordable housing units.

3.2.E MARTINSVILLE

The Martinsville Neighborhood is located in the northeastern section of Bridgewater, near Warren Township and Bernards Township. This is a predominantly residential area with larger homes on larger lots. There is a small commercial center along Washington Valley Road and has its own post office and ZIP Code. The predominant characteristic of Martinsville- Washington Valley is the very hilly nature of the land formed by the Watchung Mountain.

There is a great deal of history in the Martinsville Neighborhood. As chronicled in the booklet publication, “Images of America: Martinsville and the Washington Valley” by Patricia Valentine Whitacre and the Martinsville Community Center, the history includes the following:

- Activities go back to Native Indians and events after that show a hamlet evolving into a historic commercial center.
- A stagecoach stop located at the intersection of Mount Horeb and Washington Valley Roads became the nucleus of the hamlet of Martinsville. In 1828, the settlement was named after the first postmaster, Absalom Martin.
- By 1873, W. Richardson owned the farmhouse which was later owned by Joseph Van Nest. A blacksmith and a wheelwright shop were located opposite the hotel. A gasoline station and bank now occupy this corner.
- East of the Mount Horeb Road intersection, the C.L. Waldron store occupied the southwest corner of Washington Valley and Chimney Rock Roads. By 1873, a schoolhouse was located on the north side.
- The earliest settlers in the valley were Dutch farmers, including Waldron, Tunison, Bolmer and Goltra. In 1920, Daniel Waldron settled in Dock Watch Hollow in the early 1700s. Another Dutch settler to the valley was added in 1752 with the marriage of Johannes Van Nest to Aeltje Tunison.
- Methodists had been meeting in private homes in the area named after the biblical Mount Horeb, since the 1770s. A new parsonage was built in 1904, by which time the pastor also served the Springdale and Martinsville churches with morning, afternoon and evening services. In 1889, the pastor abandoned service to Springdale and provided services on in Martinsville.
- Originally spelled ‘Veghte’, Vactor is another Dutch name that settled in Martinsville. Blacksmith Bartley Vactor’s family put down its roots in 1850.
- John and Sarah Bartle came to Martinsville in 1843 with their five children. Later, one of the children, Ellie, bore 14 children, many of whom continued to settle in Martinsville.

This historical culture resulted in Design Standard ordinances adopted in 1991 to assure that the historic section of the Martinsville neighborhood will be preserved. These standards are located under Ordinance section 126-199.2.

3.2.F SUNSET LAKE NEIGHBORHOOD

The Sunset Lake community was built around a man-made lake in the extreme norther part of the Township near the interchanges of 287 and 78. Many of the properties have a Basking Ridge ZIP Code.

3.2.G GREEN KNOLL NEIGHBORHOOD

Green Knoll is located in the central portion of Bridgewater. This is primarily a

residential area, with commercial developments, including the Bridgewater Commons Mall a, large office parks and retail facilities fronting on the state highways of Route 22 and Route 202. The municipal complex, which houses the Administrative building, Bridgewater-Raritan High School, the Police Headquarters and Municipal Court are located in Green Knoll.

3.2.H HOBBSTOWN NEIGHBORHOOD

Hobbstown is a charming nested community off North Bridge Street. The community includes the areas surrounding Prince Rodgers Avenue, Sussex Street, Mercer Street, Richard Street, Monmouth Avenue, Hudson Street, Henry Street and Hoagland Court.

Amos General and Robert Hobbs migrated north in 1915 and purchased land in Bridgewater in the 1920s, creating a community that they named as Hobbstown. The residents of the community were relatives and friends, including the friends Bryants, Hicks, Miller, Murdock, Proctor, Sermons, McCrey and Tukes families.

Recognizing the contributions of long-time residents to support Hobbstown, the Township Mayor Moench and Council members honored the family members of David and Philip Miller by renaming the Somerville Manor Park to the David and Philip Miller Park. The resolution that was adopted acknowledged the legacy of the Hobbs family and friends, praising David and Philip Miller for their extraordinary commitment to maintaining the excellence of this community. The area is primarily residential in land use, with a church that is the functional cornerstone of the neighborhood.

3.2.I 6TH AVENUE REDEVELOPMENT NEIGHBORHOOD

The redevelopment area along Prince Rodgers Avenue was created to support senior citizen living with a small commercial center that was created to support the needs of the seniors. The pharmacy that was part of the original support design scheme has since been closed. The small outdoor seating area, the bank, health and recreational uses are still in existence. Many of the shops and restaurants are still viable and serve the needs of the immediate vicinity.

3.2.J VANHOLTEN NEIGHBORHOOD

The VanHolten neighborhood is a small area to the west of Country Club Road and is transected by a PSE&G powerline easement. It abuts the Meadow Neighborhood on the west. The east-west road is Stony Brook Road and Van Holten Road.

The characteristic of the neighborhood is single-family dwellings, including ranch and two-story home designs.

3.2.K WASHINGTON VALLEY NEIGHBORHOOD

The Washington Valley Neighborhood has a rich history, linked in some part to Martinsville. This neighborhood lies along the north and central portion of the Township, bounded by Bedminster and Warren Townships. To the south are the neighborhoods of the Foothills and Green Knoll. To the extreme west is the Sunset Lake neighborhood and to the east are Spring Run and Martinsville. The roads emanate from Washington Valley Road (a county road) which is the principal east-west road that acts as an important connector between Warren Township, the village of Martinsville and the Route 202/206 North corridor. The land uses in the Washington Valley Neighborhood are mostly single-family residential structures on larger lots.

3.2.L FOOTHILLS NEIGHBORHOOD

The Foothills neighborhood extends along Foothill Road from Mine Road easterly to where it terminates at a chain link fence at Frontier Road. In the west are the non-residential uses of Green Knoll Fire Station and Green Knoll Rescue Squad (both are volunteer organizations). To the east are single family homes with the exception of houses of worship and an office building at the extreme east end of the neighborhood.

3.2.M FINDERNE NEIGHBORHOOD

Finderne is an older community located in the southeastern portion of Bridgewater between Bound Brook and Somerville Boroughs. This is a diverse area with older neighborhoods bordering Foothill Road. Newer developments and multi-unit housing are found near the Raritan River/Manville boundary. Commercial and industrial uses are well-represented in Finderne, including Middlebrook Crossing Industrial Park, the Promenade shopping center and the TD Bank Ballpark.

In 2006, the Township commissioned a Finderne Neighborhood Study by Kitchen & Associates which offered architectural retrofit treatments in an effort to create a ‘theme’ in the Finderne commercial district. The study offered lower-cost improvements that would lend themselves to these objectives.

The Finderne Neighborhood Study went into a deep-dive of the corridor, recommending architectural improvements for each individual structure, as well as sidewalk, streetscape, and landscaping treatments. In particular, the study included sidewalk improvement recommendations at the intersection of Polhemus lane and Chimney Rock Road.

3.2.N NEIGHBORHOOD RECOMMENDATIONS

Bridgewater offers a variety of housing options for residents that have different lifestyle preferences, with housing types ranging from apartments, condominiums, townhouses, single family detached dwellings, assisted living, nursing homes, and group homes, with both rental and ownership tenures.

With the Fourth Round of affordable housing requirements commencing on July 1, 2025 through June 30, 2035, the Township has undertaken significant planning to satisfy its obligation, separate from this Master Plan. The Township has focused on preserving existing neighborhoods, and satisfying the obligation without significant impact to the development characteristics of existing residential areas. The Township has utilized the requirements of the Fourth Round of affordable housing to address particular housing demographics and needs, understanding that development will be required within a short period of time. Multi-family or high-density development should be continue to be limited to the projects contributing to the Fourth Round obligation that will be outlined in the Housing Element and Fair Share Plan. Outside of that Master Plan Element, the Township should undertake a planning study to better understand other areas that may be appropriate for different housing types and transition areas with a mixture of neighborhood retail and residential uses - such as the Route 28 corridor.

The Finderne Neighborhood should receive attention to the architectural upgrades that are offered in the Kitchen & Associates Architectural Services, PA, 2006. These upgrades should be made part of the Ordinance, similar to that of the Design Standards for Martinsville. The Finderne Neighborhood Plan provides a pictorial representation of the simple features which can be incorporated into the design standards by reference to supplement the requirements of the Ordinance.

3.3 ZONING DISTRICTS

The land use (zoning) districts provide a range of single family and multiple family housing types. Mixed use and non-residential districts are also found in several nodes throughout the landscape of Bridgewater. Cumulatively, a balance is achieved across the geographic spectrum of the Township. The districts require minimum tract sizes which promote cohesive, consistency in development and rhythm in the streetscape. Below is a summary of the lot size requirements.

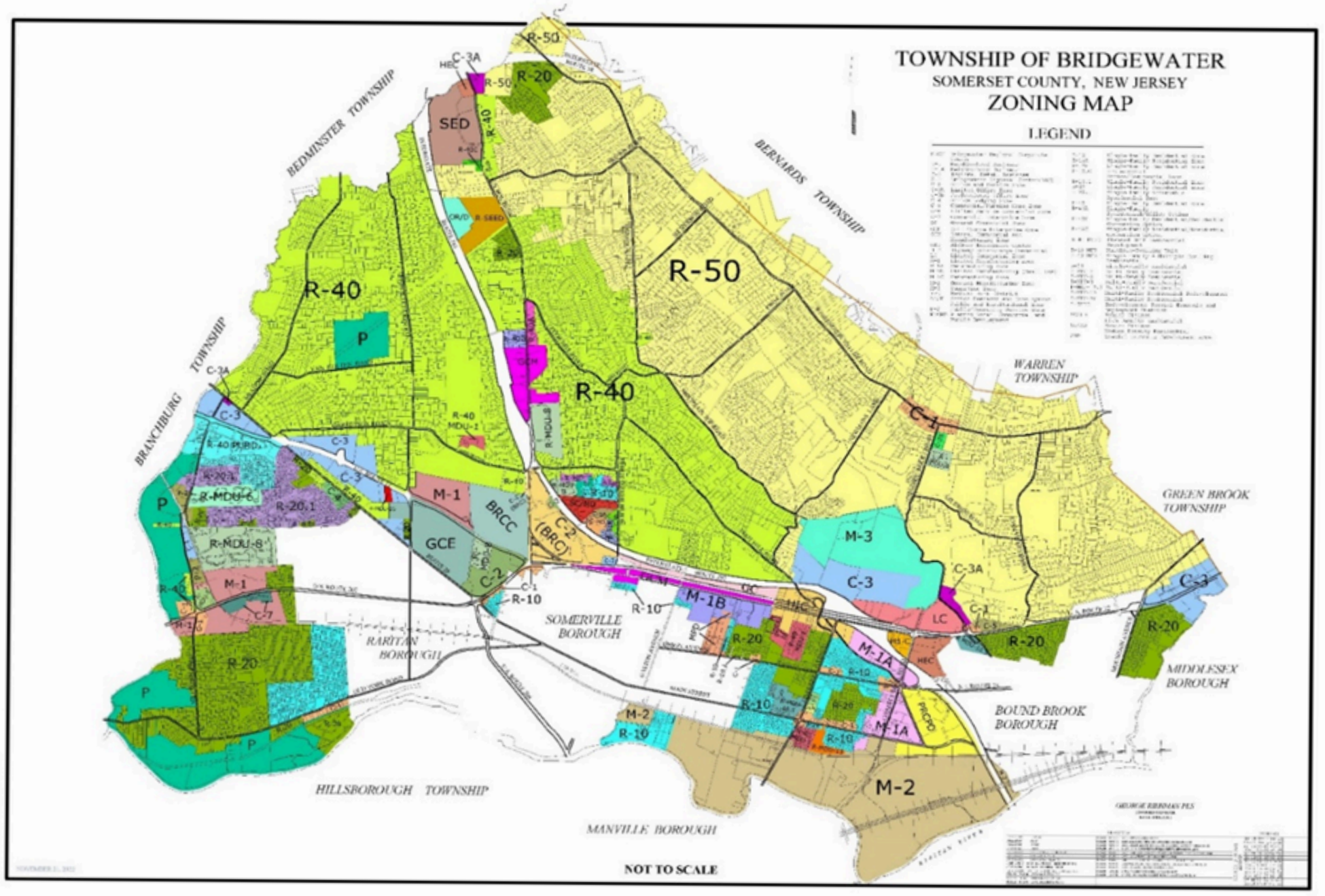
3.3.A ZONE DISTRICT LOT SIZE REQUIREMENTS

The following table provides each of the existing zone districts within the Township, along with the corresponding minimum lot areas required for each zone.

Residential Zone District	Minimum Lot Area
R-40 Single Family Residential	50,000 s.f.
R-40 Single Family Residential	40,000 s.f.
R-20 Single Family Residential	20,000 s.f.
R-10 Single Family Residential	10,000 s.f.
R-10A Single Family Residential	10,000 s.f.
R-10B Single Family Residential	6,000 s.f.
R-10.1 Single Family Residential	10,000 s.f.
R-20.1 Single Family / Affordable Residential	2,000 s.f.
R-40 MDU-1 Single Family and Multiple Dwelling	50,000 s.f.
SC/HD Senior Citizen/High Density Residential	4 acres
SC/MD Senior Citizen Medium Density Residential	5 acres
SC-R Senior Citizen Residential	17 acres
R-MDU Multifamily Residential	12 acres
R-40 PURD Planned Unit Residential	6,000 s.f.
R-MDU26 Multifamily Residential	5.0 acres
R-MDU-13 Multifamily Residential	18.0 acres
AH-3 Zone	40,000 s.f. (Multi-family)
	25,000 s.f. (Veterans Housing)

Non-Residential District	Minimum Lot/Tract Size
HEC Highway Enterprise Center	5 acres
GCE Golf Course Enterprise	150 acres
C-1 Neighborhood Business	40,000 s.f.
C-1A Neighborhood Business	5 acres
C-2 Regional Retail Business	10 acres
C-3 Office and Service	5 acres
C-3A Limited Office Zone	30,000 s.f.
C-3B Professional Office	2 acres
C-4 Office Lodging	5 acres
C-5 Commercial Nursing Home	3 acres
C-6 Limited-Service Commercial	10,000 s.f.
C-7 Commercial Enterprise	9 acres
GCM General Commercial and Manufacturing	5 acres
HIC Highway Interchange Commercial	5 acres
HEC Highway Enterprise Center	5 acres
GC General Commercial	5 acres
M-1 Limited Manufacturing	10 acres
M-1A Manufacturing	5 acres
M-1B Limited Manufacturing (Small Lot)	2 acres

Non-Residential District	Minimum Lot/Tract Size
M-1C Manufacturing	5 acres
M-2 General Manufacturing	20 acres
M-3 Quarrying	100 acres
SED Special Economic Development	110 acres
LC Limited Commercial	10 acres
C-2-BRC Bridgewater Regional Center	110 acres
PRCPD Planned Retail Commercial Public Development	20 acres
MPD Medical Park	35,000 s.f.
OR/D Office Research Development	45 acres
Mixed Use District	**Minimum Lot/Tract Size**
R-10C Professional Office/Residential Zone	10,000 s.f.
R-40A Single Family Residential/Office Option	40,000 s.f.
R-40B Single Family/Residential Conversion Option	40,000 s.f. Residential 7 acres Professional
R-40C Single Family/Residential Conversion Option	40,000 s.f. Residential 2 acres Professional
-SEED Redevelopment Special Economic & Employmer	50 acres
Public District	**Minimum Lot/Tract Size**
P Public and Institutional	30,000 s.f.
P-2 Public/Community Service	20,000 s.f.


TOWNSHIP OF BRIDGEWATER
SOMERSET COUNTY, NEW JERSEY
ZONING MAP
LEGEND
BEDMINSTER TOWNSHIP
BERNARDS TOWNSHIP
WARREN TOWNSHIP
GREEN BROOK TOWNSHIP
BRANCHBURG TOWNSHIP
SOMERVILLE BOROUGH
RARITAN BOROUGH
MIDDLESEX BOROUGH
BOUND BROOK BOROUGH
HILLSBOROUGH TOWNSHIP
MANVILLE BOROUGH
R-50
R-40
R-20
R-10
SED
P
M-1
M-1A
M-1B
M-2
M-3
BRCC
GCE
C-1
C-2
C-3
C-3A
LC
HEC
R-MDU-8
R-20.1
NOT TO SCALE

3.3.B RESIDENTIAL ZONING DISTRICTS

There is a wide range of districts found throughout the Township with a diverse offering of permitted principal, accessory and conditional uses.

1. R-50 Single Family Residential

This zone is principally found in the northern portion of the Township, which includes portions of the neighborhood section of Martinsville, Spring Run and Washington Valley. This zone has environmentally sensitive slopes which amply supports the need for larger lot areas in order to preserve the history, slopes and woodlands and yet have space for reasonable development. It is the desire to respond to environmental objectives that prompt the largest minimum lot size of all the single-family residential zones in Bridgewater. The limits of the zone extend to Bernards and Warren Townships on the north to the area of Mountaintop Road to the south. Its linear pattern extends from Bedminster Township at the northwest to Green Brook Township at the southeast. This area displays subdivision layouts with curvilinear street patterns and offers a great deal of open space and preserved lands held in ownership by Homeowners' Associations. Permitted principal uses are single family detached dwellings. Country clubs and open-air recreation facilities that have their principal access to a public street of a State or County jurisdiction or roads that also are applicable to Houses of Worship are permitted. Any form of agriculture and municipal facilities deemed to be necessary by the governing body are permitted.

2. R-40 Single Family Residential

The R-40 zone primarily lies downslope of the R-50 zone and to the west of Interstate Route 287 and further west to the North Branch of the Raritan River. The common boundary lines of Branchburg and Bedminster Townships borders the zone. It comprises the neighborhood section of Foothills, portions of Green Knoll as well as the neighborhoods of Country Club and Meadow sections. The land is significantly developed with single family dwellings to the east of Route 287 and shows large areas of preserved tracts to the west of Route 287. Permitted principal uses in the R-40 zone are single family detached dwellings. Country clubs and open-air recreation facilities that have their principal access to a public street of a State or County jurisdiction or roads that also are applicable to Houses of Worship are permitted. Any form of agriculture and municipal facilities deemed to be necessary by the governing body are permitted.

3. R-20 Single Family Residential

This zone is found in several of the older neighborhood sections of the Township.

It is found in the westerly portion of the Bradley Gardens neighborhood as well as in isolated areas of the Finderne neighborhood. It is also found flanking a projection of Bound Brook Borough in the Thomae Park and Shady Lane neighborhood sections. This is a zone where there have historically been smaller dwellings on smaller lots. A small section of the older neighborhood of Sunset Lake is included in this zone. Permitted principal uses in the R-20 zone are single family detached dwellings, country clubs and open-air recreation facilities that have their principal access to a public street of a State or County jurisdiction or roads that also are applicable to Houses of Worship. Any form of agriculture and municipal facilities deemed to be necessary by the governing body are also permitted.

4. R-10 Single Family Residential

This zone is found in several of the older neighborhood sections of the Township. It is found in a portion of Bradley Gardens as well as in isolated areas of Finderne. The R-10 zone is also found in a portion of the Green Knoll neighborhood section, just to the east of Interstate Route 287. It is also found in the Hobbstown neighborhood and a small section near the Circle. The road pattern is grid, as opposed to being the curvilinear layouts found in the northerly part of the Township.

The Bradley Gardens section is experiencing a conversion of the small tracts of land with new larger homes that consume more of the lot area and prompt the request for side yard variances from the Zoning Board of Adjustment. Permitted principal uses in the R-10 zone are single family detached dwellings, country clubs and open-air recreation facilities that have their principal access to a public street of a State or County jurisdiction or roads that also are applicable to Houses of Worship. Any form of agriculture and municipal facilities deemed to be necessary by the governing body are also permitted.

5. R-10A Single Family Residential

This zone is located on North Bridge Street, just north of Route 287. It lies in the 6th Avenue Redevelopment neighborhood. Permitted principal uses are single-family detached dwellings and shared housing. Shared housing is for adult residents.

6. R-10B Single Family Residential

The R-10B zone is located in small sections of Green Knoll, south of Woodlawn Avenue and north of Hobbstown. Permitted principal uses are limited to single family detached dwellings.

7. R-10.1 Single Family Residential

Permitted principal uses in the R-10.1 zone are single family detached

dwellings, Country clubs and open-air recreation facilities that have their principal access to a public street of a State or County jurisdiction or roads that also are applicable to Houses of Worship are permitted. Any form of agriculture and municipal facilities deemed to be necessary by the governing body are also permitted.

8. R-20.1 Single Family / Affordable Residential

This zone is found in the Vanderveer neighborhood section of the Township and offers an affordable housing component. Permitted principal uses in the R-20.1 zone are single family detached dwellings, country clubs and open-air recreation facilities that have their principal access to a public street of a State or County jurisdiction or roads that also are applicable to Houses of Worship. Any form of agriculture and municipal facilities deemed to be necessary by the governing body is a permitted use.

9. R-40 MDU-1 Single Family and Multiple Dwelling

This zone is located in the southerly portion of the Township, along, mostly along Finderne Avenue. It is next to the senior citizen townhouse development in the SC-R zone. This zone is principally made up of multiple family units, but there are single family dwellings in the area as well.

The zone is also found to the north of Union Avenue, surrounded by the R-20 zone. These homes are single family as well as multiple family.

10. SC/HD Senior Citizen/High Density Residential

This zone is designed to provide for the development of subsidized or nonprofit high-density housing designed for use by lower income senior citizens and the handicapped. It is located in the 6th Avenue Redevelopment neighborhood section. It permits single family attached dwellings and multifamily dwellings.

11. SC/MD Senior Citizen Medium Density Residential

It is located in the 6th Avenue Redevelopment neighborhood section of the Township. This permits professional offices, public and private recreation facilities and assisted living facilities.

12. SC-R Senior Citizen Residential

This zone lies within the Finderne neighborhood section and is the site of the former Weyerhauser industrial building and offices. These structures have been razed and a townhouse development has been approved by the Planning Board. Permitted uses include senior citizen housing which consists of detached units,

patio and zero lot line houses, townhouses and multifamily dwellings.

13. R-MDU Multifamily Residential

There are several versions of the multifamily, R-MDU zone, and these options are exhibited by varying density. The zone is found in several locations throughout the Township.

14. R-40 PURD Planned Unit Residential

This zone lies along Milltown Road in the Vanderveer neighborhood sections of the Township. Permitted uses are limited to single family detached dwellings.

15. MDU-26 Multifamily Residential

This zone is located along Route 22. The zone permits the construction of 40 affordable units, which has been completed with rental units. There are affordable housing units dispersed throughout six existing buildings.

16. R-MDU-13 Multifamily Residential

This zone is located along Main Street and comprises the Mt. Pleasant Villas development.

3.3.C NON-RESIDENTIAL ZONING DISTRICTS

1. GCE Golf Course Enterprise

This land comprises the Raritan Valley Golf Course properties located just to the west of the Circle. There are two parcels associated with the GCE zone. The larger parcel fronts on Route 22, Route 28 and Country Club Road. The smaller tract has access to Country Club Road. Zoning for permitted uses was collaboratively arrived at with the golf course owner. Permitted uses in the zone are private golf courses, tennis courts and swimming pools.

2. C-1 Neighborhood Business

The C-1 Neighborhood section of the Township Business zone is found in the Finderne neighborhood section of the Township as well as the Martinsville-Washington Valley and Bradley Gardens neighborhood sections. Permitted uses include retail or personal service establishments which are clearly of a neighborhood service character. Also permitted are single family detached dwellings.

3. C-1A Neighborhood Business

This zone is intended to offer convenient shopping and personal service for nearby elderly populations and implements the Land Use of the 6th Avenue Redevelopment Plan. Permitted uses are retail or personal service establishments which are clearly of a neighborhood character.

4. C-2 Regional Retail Business

This zone is intended to serve the regional shopper. It is locally known as the Commons Mall and includes its commercial environs. Permitted principal uses include regionally oriented retail shopping stores, shops, personal service, business and professional offices, hotels and motels, restaurants theaters and auditoriums. Any form of agriculture or horticulture is also permitted.

5. C-3 Office and Service

This zone is located on the Route 28 and Route 22 corridors. It is not included in any designated neighborhood section of the Township. Permitted principal uses include business, professional and service offices and establishments, essential services, nursing homes and assisted living facilities, medical and dental offices, banking and research laboratories.

6. C-3A Limited Office Zone

This zone is found on the easterly side of Thompson Avenue and also found in the westernmost portion of the Township along old Route 28. Neither tract lies within a designated neighborhood section of the Township. Permitted principal uses include limited office development, business, professional and service offices and establishments, essential services, nursing homes and assisted living facilities, medical and dental offices and research laboratories.

7. C-3B Professional Office

This zone is located on Chimney Rock Road, just south of Washington Valley Road. It is within the Martinsville-Washington Valley Neighborhoods. The purpose of the zone is to recognize the need to establish a transitional zone for those properties on Chimney Rock Road between the multifamily Loft Farm development and the retail center located at the corner of Chimney Rock Road and Washington Valley Road in the Martinsville section. Permitted uses in this zone are single family residences, professional and business offices, including medical and dental offices.

8. C-4 Office Lodging

The C-4 zone is located on Route 28 across from St. Bernard Cemetery. It is located

in the Vanderveer neighborhood. Permitted principal uses are single-family residences, restaurants and business, professional and service offices and establishments, essential services, nursing homes and assisted living facilities, medical and dental offices, banking and research laboratories.

9. C-5 Commercial Nursing Home

This zone is located on the extreme east end of the Township along Route 22. It is designed to meet the needs of individuals that require personal nursing care. It lies within the no designated neighborhood section of the Township. Permitted principal uses are nursing homes, continuing care retirement facilities, congregate care facilities, assisted living facilities, senior housing, general offices and medical and dental offices.

10. C-6 Limited-Service Commercial

The C-6 zone lies on North Bridge Street within the 6th Avenue Redevelopment neighborhood. The purpose of the zone is to provide limited-service commercial uses and community service uses such as financial institutions, professional office medical offices and similar nonretail uses. Permitted principal uses are identified as banks and financial institutions, professional offices, medical and dental offices, child care centers and Houses of Worship.

11. C-7 Commercial Enterprise

The C-7 zone is located on Route 202 in the westerly portion of the Township. It is located across from the Wegman's supermarket that lies across the highway. This zone was created as part of a plan to consolidate eleven individual lots into one lot for the purpose of a more cohesive development. The tract is not part of any designated neighborhood section of the Township. Permitted principal uses are retail sales and services, personal service such as health clubs, food markets, professionals and business offices, banks and financial institutions, restaurants, gas service stations and hotels, west of Fisher Place. Single family dwellings are grandfathered.

12. GCM General Commercial and Manufacturing

The GCM zone lies along both sides of Route 202/206 North and promotes a range of nonresidential uses. This zone lies within the Green Knoll neighborhood. Permitted principal uses include office and service uses, manufacturing, laboratory, printing and publishing uses, research laboratories, essential services and any form of agriculture or horticulture.

13. HIC Highway Interchange Commercial

The purpose of the HIC zone is to provide for the regional commercial and transient needs and uses appropriately situated at or adjacent to the intersection of major regional highways. Permitted principal uses and identified permitted uses are hotels, motels, inns, restaurants, cocktail lounges, conference centers, office and service uses.

14. HEC Highway Enterprise Center

The HEC zone is located at a large industrial site on Route 22. Located in the easterly portion of Bridgewater Township, it is not in a designated neighborhood section of the Township. The zone permits business, professional and service offices and establishments, hotels, extended stay lodges, conference centers, medical support centers, banquet facilities, health clubs, adult medical day care, indoor recreation and research facilities. There has been a Zoning Board of Adjustment approval for the owner to continue the then-existing industrial use, but not increase the level of the gross industrial use area on the site.

15. GC General Commercial

The purpose of the GC zone is to provide uses that serve Township residents and others in a manner that provides desired employment and services, yet minimizes visual impacts. The zone lies between Route 22 and Interstate Route 287. It does not lie within a designated neighborhood section of the Township. Permitted principal uses include business, professional and service offices such as banks, credit services security, commodity brokers and dealers, insurance carriers, medical offices dental offices, engineering accounting, law and architectural services. Essential services, gyms and health clubs, indoor commercial recreation, retail services, restaurants, medical support center of limited service are also permitted.

16. M-1 Limited Manufacturing

The M-1 zone is found in the westerly side of the Township along Route 202 and is not within a designated neighborhood section of the Township. Also, the SJP office park located at the Circle neighborhood is included in this zone. Permitted principal uses include office and service uses, manufacturing, laboratory, printing and publishing uses, research laboratories, essential services and any form of agriculture or horticulture.

Additionally, golf courses, regional shopping along Route 202, multimedia productions, high technology business incubation, adult medical day care are permitted under certain circumstances. These uses are within a special designation of the M-1 zone and includes the Wegman's shopping center. Warehouses have been eliminated by ordinance as a permitted principal use in the zone.

17. M-1A Manufacturing

This zone is primarily found along Chimney Rock Road in the Finderne neighborhood. Permitted principal uses include office and service uses, manufacturing, laboratory, printing and publishing uses, research laboratories, essential services; any form of agriculture or horticulture, trucking terminals, essential services, multimedia productions, high technology business incubation and adult medical day care. Warehouse use has been amended by ordinance to be an accessory use rather than a principal use in the zone.

18. M-1B Limited Manufacturing (Small Lot)

The M-1B zone lies along Route 22 in the easterly side of the Township, and it is not within a designated neighborhood section of the Township. Principal permitted uses include business offices, manufacturing, research laboratories, animal hospitals and mini-warehouses, storage facilities, private security vaults, medical offices and dental offices, medical support centers of limited service. Warehouse use has been amended by ordinance to be an accessory use rather than a principal use in the zone.

19. M-1C Manufacturing

The zone is located at the southwesterly intersection of Route 22 and Chimney Rock Road in the easterly portion of the Township. It does not lie in a designated neighborhood section of the Township. Uses that are permitted in the zone are business, professional and service offices and establishments, engineering and architectural services, accounting, manufacturing, truck terminals, essential services, multimedia production, research laboratories, adult medical day care, nursing homes and assisted living facilities and indoor commercial recreation. There is also a more aggressive development option that can be used if there is a consolidation of lots within the zone. Warehouse use has been amended by ordinance to be an accessory use rather than a principal use in the zone.

20. M-2 General Manufacturing

The zone is located in the extreme southeasterly portion of the Township, to the west of Route 287. It does not lie within a designated neighborhood section of the Township. The following permitted principal uses are identified as manufacturing, fabricating, printing, publishing, research laboratories, radio and television stations, essential services, any form of agriculture or horticulture, and mini-storage warehouses. Warehouses have been eliminated by ordinance as a permitted principal use in the zone.

21. M-3 Quarrying

The M-3 zone is a specialized, unique zone designation for the existing Stavola

Quarry located to the north of Route 287, to the north of the C-3 zone. Permitted principal uses are quarrying, processing of stone, sand and gravel, including transportation and storage, crushing, grinding, pulverizing and burning of extracted raw materials, essential services, any form of agriculture or horticulture. The departments of public works for the municipalities of Bound Brook, Bridgewater and Somerset County are also located in the M-3 zone.

22. SED Special Economic Development

The zone is located in the northerly portion of the Township, along Route 202/206 South. It is not located in a designated neighborhood section of the Township. Principal permitted uses for this zone scientific research laboratory and other experimental testing or research establishments, office facilities occupied by a single company or affiliated members of a single entity, any use of light manufacturing nature which involves processing, assembly or packaging of material, and essential services.

23. LC Limited Commercial

This zone lies to the north of Route 22 and to the west of Chimney Rock Road, and is currently a fully-developed retail shopping center. It is not within a designated neighborhood. Permitted principal uses are retail stores and shops (excluding auto repair and auto service uses), restaurants, movie theaters, auditoriums, commercial recreation facilities, recreational open space and child care centers.

24. C-2 and BRC Bridgewater Regional Center

This zone includes the regional shopping center that contains approximately 1.1 million square feet, located within the Commons neighborhood section of the Township. Permitted principal uses include a variety of general merchandise and specialty stores, eating and drinking establishments, movie theaters, personal service establishments, general business, office building use. General business and professional office, data processing centers and full-service hotels are also permitted.

25. PRCPD Planned Retail Commercial Public Development

This zone is located in the southeasterly portion of the Township, within the Finderne Neighborhood. Permitted principal uses are broad and include retail commercial and public facilities sports arena, stadiums, open space professional corporate and administrative offices and hotels and motels, garden centers and outdoor storage as part of a permitted retail commercial use. Manufacturing, fabricating, printing, publishing, research laboratories, radio and television stations, essential services, any form of agriculture or horticulture, and mini-storage warehouses are permitted as well.

26. MPD Medical Park

This zone was created to respond to the medical influences of the Somerset Hospital and the medical office node that was developing in the Finderne neighborhood. The location of the zone begins on Union Avenue, one of the routes that leads to the hospital. Permitted uses are for medical specialists, including doctors, dentist and other health care professionals, medical, dental or diagnostic laboratories, regional sales offices related to medical equipment, home health agencies, visiting nurses' service, county related medical facilities, pharmacy, skilled nursing home facilities, dispensing opticians, adult medical day care educational facilities related to the medical field, psychiatric and physiological counseling, and medical outpatient services.

27. OR/D Office Research Development

This zone is a portion of the prior SED zone which was revised to respond to the desire to maintain the office and research corporations that have successfully operated in this area. It is a portion of the former home of American Hoechst and Sanofi. The OR/D zone is located on the westerly side of Route 202/206 South and partially lies in the Green Knoll neighborhood section of the Township with the bulk of the tract not associated with any designated neighborhood. Permitted principal uses include scientific research, diagnostic laboratories, technology laboratories, product development provided that any processing of raw materials must be incidental to the research. Business offices, light manufacturing and conference centers are also permitted.

3.3.D MIXED-USE DISTRICTS

1. R-10C Professional Office/Residential Zone

This zone is found in the Finderne neighborhood. It permits mixed uses. Permitted principal uses in the R-10C zone are single family detached dwellings, country clubs and open-air recreation facilities that have their principal access to a public street of a State or County jurisdiction or roads that also are applicable to Houses of Worship. Any form of agriculture and municipal facilities deemed to be necessary by the governing body and professional offices and personal service uses are also permitted.

2. R-40A Single Family Residential/Office Option

This zone lies along Highway Route 202/206 North in the Green Knoll neighborhood. This zone is intended to provide the option of low intensity office while assuring that the residential community is offered maximum protection from the potential impacts that might me realized from adjacent higher intensity nonresidential uses. Permitted principal uses in the R-40A zone are single-family

detached dwellings, country clubs and open-air recreation facilities that have their principal access to a public street of a State or County jurisdiction or roads that also are applicable to Houses of Worship. Any form of agriculture and municipal facilities deemed to be necessary by the governing body are also permitted. Low intensity professional business and medical office uses are permitted, including engineering, legal, data processing, consulting accounting and similar uses.

3. R-40B Single Family/Residential Conversion Option

Similar to the R-40A Zone, this zone lies along Highway Route 202/206 in the Green Knoll neighborhood. The zone is intended to recognize the development patterns within certain areas and their ability to adapt for comprehensive low intensity development. Permitted principal uses in the R-40B zone are single family detached dwellings, country clubs and open-air recreation facilities that have their principal access to a public street of a State or County jurisdiction or roads that also are applicable to Houses of Worship. Any form of agriculture and municipal facilities deemed to be necessary by the governing body. Low intensity professional business uses are also permitted, including engineering, legal, data processing, consulting accounting and similar uses.

4. R-SEED Redevelopment Special Economic & Employment District

The R-SEED zone is located on the westerly side of Route 202/206 N and partially lies in the Green Knoll neighborhood section of the Township with the bulk of the tract not associated with any designated neighborhood. This zone permits office, retail and multifamily residential dwellings. It also permits Houses of Worship.

3.3.E PUBLIC DISTRICTS

1. P Public and Institutional

The P zone provides areas for development of facilities owned or operated by governmental agencies or nonprofit institutions. It lies within the Vanderveer neighborhood. Principal permitted uses include pubic and institutional, agricultural and recreational uses owned and/or operated by agencies of the federal, state, county and municipal government as well as nonprofit institutions primarily serving the residents of the Township of Bridgewater.

2. P-2 Public/Community Service

The purpose of the P-2 zone is to provide for the development of facilities owned or operated by governmental agencies, nonprofit institutions and community service establishments. Community service and professional offices providing community benefit are permitted, but are not limited to supporting and serving the immediate

neighborhood. It lies within the Vanderveer neighborhood. Other principal permitted uses are child care centers, houses of worship, medical and dental offices, pubic and institutional, agricultural and recreational uses owned and/or operated by agencies of the federal, state, county and municipal government as well as nonprofit institutions.

3.3.F AFFORDABLE HOUSING ZONES

As part of the Township's Fourth Round Housing Element and Fair Share Plan, three affordable housing zones were proposed to provide new zoning that permits multi-family or age-restricted housing with a required affordable set-aside as a proportion of the overall units. The Township has since adopted the AH-3 Zone, and the other zones are pending adoption at this time.

3.4 ACTIVE ADULT HOUSING/INDEPENDENT LIVING

Bridgewater has a number of existing age-restricted housing opportunities with examples noted as follows:

- Delaney off Frontier Road has independent living villas, independent living apartments, which are rental units. The facility functions similar to a "Continuing Care Retirement Community" (CCRC), with additional units that are assisted living and memory care, as described in the following section.
- Centerbridge and Centerbridge II on Shasta Drive has independent living apartments
- Apartment Two on 4th Avenue has independent living apartments

3.5 SENIOR HOUSING/ASSISTED LIVING

Bridgewater has a number of existing senior housing and assisted living facilities, with examples noted as follows:

- Group Homes offering assistance to seniors are found throughout the Township including in the 6th Avenue Redevelopment neighborhood area along Prince Rodgers, as well as other areas of the Township.
- Sunrise Assisted Living on Route 22 Eastbound
- Chelsea on Route 202/206 N.
- Laurel Circle on Monroe Street
- Somerset ARC on Union Avenue
- Bridgewater Township Consumer Home on Brahma
- Delaney at Bridgewater assisted living and memory care units

3.6 CLUSTER DEVELOPMENTS

In the early 1990s, Bridgewater was largely considered to be a very rural community. As noted by then-Councilman Bill Saler, political goals included extending sewer

service to all homes in the Township, but without having a surge in density. Part of the strategy at that time was embracing the desire to increase the inventory of open space, through the cluster subdivision design. This approach would permanently preserve acres of green fields and woodlands that would be available to the residents. These preserved lands would be maintained by a Homeowner's Association instead of the Township. This was viewed as a superior approach toward establishing and maintaining the quality and quantity of preserved land.

The design of the cluster subdivision requires certain pre-conditions as well as design criteria for the subdivision itself. Critical to establishing the maximum number of lots that can be created is the submission of a 'qualifying subdivision map'. The qualifying subdivision is based on a conventional layout that demonstrates the number of lots that can be created without the need for a variance or design waiver. The first course of Planning Board review is the examination of the coventional subdivision, and validation of the maximum number of lots, per the conventional subdivision plat. No more lots than are shown on the qualifying map can be created in the cluster.

The cluster subdivision option is available in tracts that lie in the R-40 and R-50 zones. The cluster requires a regulatory approach that requires a significant portion of the parcel to remain undeveloped and green. It also requires that the lot sizes are of a scale that facilitates this open space conservation. This is a design strategy that preserves grasslands, woodlands and wetlands from potential disturbance. The concept is to allow building lots to be smaller and the residual land is to be consolidated into a large tract slated for conservation purposes. This preserved tract is often managed by a Homeowners' Association. Since its adoption, 648 cluster lots have been created in Bridgewater Township. The Block and lot numbers are listed individually in the Appendices, Volume 1.

3.7 AIRPORT, BUS AND RAIL TRANSPORTATION

There is no airport within Bridgewater Township; however, nearby in Bedminster Township is the George Walker Field (Formerly Somerset Airport) that has operated since 1946. This is the closest airport to Bridgewater. There are restrictions on the George Walker Field Airport related to tract configuration and a limitation on the length of runway. Conditional use designation of the airport provides a level of assurance that the conditions that have been previously defined are permitted, but expansion of the airport is not permitted. In order to get relief from these restrictions, an application before the Bedminster Township Zoning Board of Adjustment would be required.

The Solberg-Hunterdon Airport is located to the west, in Readington Township and the Central Jersey Regional Airport is located to the south in Hillsborough Township. These airports are open to the public and offer charter flight services. They operate

in all weather conditions and have instrument approaches available for use in bad weather. Scheduled commercial passenger service is available at Morristown Airport which is located approximately 17 miles north in Morristown.

Bus service is available from the Raritan Valley Line of NJ Transit which provides rider service to the Bridgewater station located at the former American Cyanamid property. NJ Transit suspended service at the Finderne station off Finderne Avenue in late 2006.

Daily New Jersey Transit commuter parking is available at the New Jersey Transit Stop at the White Lot at the TD Bank Ballpark. This New Jersey Transit stop is serviced by the Raritan Valley Line, providing service to Newark Penn Station with transfer service to New York Penn Station and High Bridge in New Jersey. The White Lot at the TD Bank Ballpark also features covered parking spaces, which are an asset for keeping cars cooler in the summer and the snow off the roof in the winter. WLABT is a self-park facility, offering daily and overnight parking, as well as quarterly, bi-annual, and yearly discounted parking options.

3.8 HOUSES OF WORSHIP

The Bridgewater ordinance permits Houses of Worship as a Conditional Use on State and County roads as well as the municipal roadways of:

- Garretson Road from Country Club Rd. to Route 202/206 North overpass.
- Country Club Road from Highway 28 to Garretson Road.
- Milltown Road from Route 22 to Route 202.
- Prince Rodgers Avenue from County Route 629 (North Bridge Street) to Route 287 overpass.

Since passage of these access requirements in 2011, new construction of the Al Falah Center and expansion of the Sri Venkateswara Temple have occurred; both are located on Route 202/206 South.

3.9 RELATIONSHIP TO OTHER MASTER PLAN ELEMENTS

This Master Plan incorporates several concepts that are found in the prior Master Plans. There is expansion and definition of goals in this Master Plan and there are recommendations for ordinance amendments that are needed to be considered. In fact, the recommended ordinance amendments go farther to protect and preserve the environment through responsible stewardship. The Master Plan focuses on maintaining and improving Bridgewater, keeping it as the high-quality municipality that it is. The goal was stated back in 2005 and is as strong a goal today as was 16 years ago. Bridgewater is regarded as one of the best communities in the state and it continually strives to maintain that position.

3.10 IMPACT ON ADJOINING MUNICIPALITIES

As required by the M.L.U.L, the Amendment to the Land Use Element of the Master Plan considers the impacts of its recommendations beyond the borders of Bridgewater since actions taken in this Master Plan by Bridgewater could possibly affect adjoining municipalities.

Bridgewater Township borders thirteen municipalities, and an evaluation of the impact on each is described below.

A. Bedminster Township - A portion of the northerly section of Bridgewater and in the R-40 residential zone lies along the jurisdictional line of Bedminster Township, which has the R-10 (10-acre, large lot) zone. A small portion in the south of the Township lies in a Public P zone and an airport zone. Although there may be business and patronage activity on the Route 202/206 North, it is anticipated that there will be no significant negative cross-border impacts from implementation of any recommendations in this Master Plan.

B. Bernards Township - Bernards Township lies along the second ridge of the Watchung Mountain. Zoning along the common border with Bridgewater are the Bernards' Public Purpose P-1 and the 2-Acre Residential R-3 zones. These zones abut Bridgewater's R-50 Single Family zone, which is the Township's low-density residential zone. Due to the environmental characteristics of the Watchung Mountains, both communities have ordinances in place intending to protect the environmentally sensitive slopes of the Second Watchung Mountain. Due to the lack of a key transportation routes, there are no negative cross-border impacts anticipated from the zoning recommendations which would affect the Township.

C. Borough of Bound Brook - The Middle Brook and Route 287 provide a sharp edge separating Bound Brook Borough from Bridgewater Township. The Neighborhood Business/Residential NB/R zoning along East Main Street of Bound Brook is a mix of residential and non-residential uses. To the north and south of the Norfolk Southern railroad line is the Industrial Park IP zone which abuts Bridgewater's industrial M-2 zone. Like Manville, Bound Brook is a historic community that is experiencing extensive residential development. The apartments being constructed are found in the area that used to be flooded (before the flood wall was installed). These transit-village like residential developments will likely increase traffic on Finderne Avenue (as noted on Page 47 of the Economic Development Plan Element-Route 22 Corridor by Phillips Preiss Shapiro Associates, June, 2009). There are no recommended policies or zoning changes in the Master Plan which would result in a negative impact on the Borough of Bound Brook.

D. Branchburg Township - Branchburg Township borders Bridgewater Township to the west and Route 202 and Route 22 are shared by both communities. Branchburg's

historic features along this border include the North Branch Cemetery Association off Vanderveer Avenue in Branchburg. The Printmaker Council in North Branch Greenway park is both in Branchburg and Bridgewater. The Somerset County North Branch Park is in Branchburg Township as well as Bridgewater Township.

Branchburg's major border with Bridgewater is the Affordable Housing AH-1 zone. Along both sides of the dividing river are large areas of floodplain and parklands which naturally throttle back development. Bridgewater has no policies, objectives, or recommendations which would impact this common border. The Master Plan recommendations will not create a negative impact to any of the elements of Branchburg's zone plan.

E. Franklin Township - The Raritan River separates Bridgewater Township's M-2 zone from the Franklin Township Agricultural A zone, which stretches the length of the common border. This area of Bridgewater is subject to severe environmental constraints and is separated from the rest of Bridgewater Township by a rail corridor. The Raritan River Greenway initiative that is proposed for this section of the Township will enhance the ambiance. The Master Plan has no recommendations which will negatively impact Franklin Township.

F. Green Brook Township - Primary access into Green Brook Township is along the major corridor of Route 22 which contains Green Brook's Regional Highway Commercial, RHC zone. This zone abuts Bridgewater's Office and Service C-3 zone. In Green Brook, the Affordable Housing District AHD zone abuts Bridgewater's Single-Family R-50 zone. There are no negative cross-border impacts anticipated from implementation of the recommendations in the Master Plan.

G. Hillsborough Township - A small portion of southern Bridgewater borders Hillsborough Township. The Raritan River forms the boundary between the two Townships. The area, proposed for a portion of the Raritan Greenway in Bridgewater, is opposite the Agricultural AG zone in Hillsborough, and is subject to significant environmental constraints on both sides of the border. There are no road networks or proposed facilities which are anticipated to cause a negative effect from implementation of any Master Plan recommendations.

H. Borough of Manville - The southeast portion of Bridgewater borders the Borough of Manville, a historic town that has experienced significant redevelopment since surviving the floods of Hurricane Floyd in 1999. There are no policies, zoning recommendations or goals that will negatively affect the zone plan of the Borough of Manville.

The Raritan River and its wide floodplains separate Manville from Bridgewater. The Manville Single-Family S-100 zone abut Bridgewater's Single-Family R-10 zone. The Industrial I and the Economic Development EED zones abut Bridgewater's General Manufacturing M-2 zone. Bridgewater has no policies or recommendations in the

Master Plan which would have an adverse impact on Manville's zone plan or redevelopment initiatives.

I. 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 its boundary by the Green Brook. This finger-like projection, which is sandwiched between Bound Brook Borough and Middlesex Borough, is primarily residential in nature. No negative cross-border impacts are expected from the recommendations in this Master Plan.

J. Raritan Borough - Raritan Borough is within the Regional Center and also endorses strategies to provide activities which will enhance the Regional Center. Although there may be some increased business traffic, in some cases, these volumes will be handled within the state highway system. The Master Plan recommendations would not create a negative impact to the Raritan's zone plan.

K. Somerville Borough - Somerville Borough is within the Regional Center and the strategies for improved vitality and for fostering a strong identity are shared among Bridgewater, Somerville and Raritan. Zoning which abuts Bridgewater include the business B-5 Highway Business zone at Route 202 which abuts Bridgewater's business zoning. Somerville's R-1 Single Family zone at Cornell Boulevard abuts Bridgewater's residential zoning. To the east and south, the single-family zones of R-2 and R-3 along Adamsville Rd. abuts Bridgewater's residential zoning. Somerville's Industrial Districts of I-1 and I-2 are generally consistent with Bridgewater's M-2 zoning, with the exception of a small pocket of R-10 Single Family zoning in Bridgewater. To the south of Union Avenue are Somerville's R-1 and R-3 zones which abut Bridgewater's MPD, Medical Park District. Uses intended to provide expanded options in the development of a symbiotic relationship is a commonly-shared goal. This Master Plan intends to further the regional benefit of enhanced corporate support along the highway corridors. The spinoff effect of enhanced vitality for Bridgewater will produce patronage for Somerville Borough. It is not envisioned that there would be negative impacts affecting Somerville Borough's zone plan.

L. South Bound Brook Borough - A very small portion of Bridgewater Township touches the Industrial I zone of South Bound Brook Borough. Since there is an intervening feature of the Raritan River, there are no roads or facilities which would serve to cause a negative effect on the Borough of South Bound Brook. There will be no negative impact on the zone plan of South Bound Brook.

M. Warren Township - In the northerly portion of Bridgewater and along the common line with Warren Township are primarily found single-family residential uses of Warren's 1.5 Acre Residential R-65 zone which abuts Bridgewater's R-50 single Family zone. As with Bernards Township, Warren Township has a policy of preservation in areas exhibiting steep slopes, which are exhibited in the area of the

borders. There are no key transportation routes that would be routinely used as a connection and it is held that there would be no negative cross-border impacts from any zoning recommendations.

3.11 LAND USE PLAN RECOMMENDATIONS

Based upon a review of the existing Ordinances by Township staff and professionals, community feedback, and the inclusion of land use goals and objectives, the following recommendations are set forth in relevant categories.

A. General Land Use Plan Recommendations

1. The Checklist requirements for "Variance Application, without Subdivision or Site Plan" should be supplemented to add the following:

    - Key Map showing the zoning on the site and within 200 feet of the site.
    - Elevations, contours of the site for slopes averaging 10% or greater for the lot.
    - Description of the request for a variance or conditional use.
    - Electronic records of filed maps and approved subdivision deeds and site plan maps that have been duly signed by the Board shall be provided to the Engineering Department. Electronic records can be provided as a condition of securing a building permit. The use of a state-approved electronic format is preferred over retaining paper copies.
    - Electronic submission of the entire application including, exhibits for display at land use meetings.

2. The Subdivision and Site Plan Checklist should be amended to include a declaration as to whether or not the property lies within the Martinsville or Finderne neighborhood. This will require placement of the Neighborhood map onto the Township website.

3. The Checklist for "Major Site Plan" and "Use Variance" should be updated to require that the Applicant include resolutions or documentation from any applications including the property, any prior variance relief granted, and/or any pre-existing nonconformities or a statement on why records could not be provided.

4. The Township should periodically review the application and escrow fee schedule and update it as deemed necessary.

5. The Finderne Neighborhood Study should be placed in the Planning Division section on the Township website.

6. Ensure that resources continue to be available for future residents, including its meandering water courses, streams and brooks and water bodies. Tree-lined streets, forested mountains and natural open fields are land uses that should be protected, while preserving public health and safety.

7. Bridgewater enjoys an exceptional reputation for its 'sense of place' which is a composite of its unique residential neighborhood sections, scenic mountain slopes, parklands and attractive roadside appearance. These assets should be preserved or enhanced by strictly adhering to the buffering requirements and architecture in order to maintain an attractive roadside appearance.

8. Drainage ditches with or without easements are the responsibility of the property owner to maintain the free and unrestricted flow.

9. High-density development, both residential and corporate, that might detract from the desired quiet, low density nature of the suburban character of the Township should be limited. This can be accomplished to a large extent by requiring that developers adhere to the strict regulations of the Ordinance.

10. The Planning Board and Zoning Board of Adjustment should enforce a design review of any application that lies within the Martinsville neighborhood or Finderne neighborhood - for site plans where the buildings require a common 'theme' and where the building height or parapet height exceeds ordinance standards. The objectives of prior Master Plans should be incorporated into Ordinance and used in the design reviews. These objectives include a low-profile, subdued building architecture in the context of the neighborhood in which the property lies.

11. The Township should consider "mandatory connections" to require that dwellings served by septic systems should be required to connect to the public sanitary sewer system when the sewer line is extended. Ordinance Section 175-9.B and C, Use of Public Sewers, should be redrafted so that connection to public sewers is more enforceable. Currently, these sections speak to the authority vested in the Bridgewater Sewage Authority. This agency no longer exists, thereby complicating the potential for enforcement.

12. The parking lot at the southeasterly quadrant of the intersection of Route 22 and Milltown Road should be explored for some meaningful use. Depending on the ultimate use for this property, zoning amendments may be necessary.

13. In sections of the Township, there are pre-existing residential lots that do not meet the minimum lot area requirement. For example, it has been noted that there is a revitalization taking place in Bradley Gardens where smaller homes on smaller lots are being razed and larger homes, with garages are being constructed in their place. Many of the existing lots do not meet the minimum lot area for the zone and therefore would typically go to the Zoning Board of Adjustment for approval to rebuild, even if the new dwelling meets all the bulk standards of the Ordinance. It is recommended that the minimum lot areas be analyzed to determine where the prevailing lot area conditions are not consistent with the zone requirements.

14. Through the years, Bridgewater has experienced growth on many levels. Affordable housing and assisted living housing have grown. Single-family homes, which included detached dwellings as well as attached dwellings, have experienced high levels of growth. Interest in Research and Development sites is strengthening. With the Township's partnership in the Regional Center, the whole of the three communities is in greater focus. Bridgewater does not intend to promote high density, multi-story apartment/condo uses because it is contrary to the low-aspect residential buildings that Bridgewater prefers. It is recognized that the region may desire and need these higher-density housing types, and its partners, Somerville and Raritan, are better poised to offer these forms of residential housing – with Somerville and Raritan offering services within a convenient walking distance for food and retail stores, restaurants, pocket parks and train stations. Daytime and nighttime activities are readily available in these two communities. Although the Bridgewater Commons creates a commercial draw to the Regional Center, Somerville and Raritan can more appropriately fill the role of 'Downtown' in the Regional Center due to its

extensive sidewalk networks and walkable downtown environment in a commuter environment. Bridgewater offers the lower-density development, which are complementary to the development patterns of Somerville and Raritan. Therefore, the needs of a variety of living lifestyles are able to be satisfied in the Regional Center.

15. Bridgewater encourages low building heights and lower-density residential development. In general, Research and Development, with its associated needs of the corporate community, are encouraged. Light Industrial use is permitted in limited sections of the Township, and this use is also encouraged, particularly when associated with medical/pharmaceutical research which has become a more prevalent use to replace traditional office uses in recent years. These commercial uses should best be zoned on roads that can already handle an increase in traffic without the need for extensive road widening improvements.

16. The Township should review the Zoning map to indicate split lot zoning in Martinsville to better show the difference between the property line and the zone line.

17. The ordinance should be amended to require the submission of the applicable Compliance Report both electronically and via hard-copy, which will ensure that the conditions of a Planning Board or Zoning Board of Adjustment action are properly translated in approved plans and other supporting documents.

18. An expanded spectrum of overlay uses for the GCE, Golf Club Enterprise zone, should be explored. This zone lies on both sides of Country Club Road, Route 22 and Route 28 and incorporates Block 400 Lot 8 (15.75 acres), which lies on the westerly side of Country Club Road and also Block 411 Lot 39 (81.89 acres) which lies on ethe easterly side of Country Club Road as well as US Route 22 and NJ State Route 28. It is recommended that these lots not be zoned for multifamily or unrestricted single-family residential development.

19. This Master Plan re-affirms the previous Master Plan/Reexamination reports and Ordinance amendments that reacted to the State Planning Commission regarding the need to control the uses of warehouses.

20. The area of Route 202-206 North which is south of the PSE&G right of way, has a variety of uses which lend themselves to an inconsistent zone pattern. It is recommended that the existing uses be studied. The Township should consider the existing residential uses, traffic, and other threshold issues in this analysis to determine the most appropriate zoning that is consistent with the area.

21. The Township should be encouraged to pursue municipal partnerships with Somerset County and the State of New Jersey to maintain and improve existing public transportation options, while seeking opportunities for reasonable expansion of those options for residents and visitors.

22. It is recommended that the wireless cellular communication ordinance be revisited and updated as technology changes and the needs of the community may dictate. Any ordinance update should include design standard provisions that require stealth or camouflaged cabling and encourage underground cabling to promote an improved visual aesthetic along municipal or utility right of ways. Additionally, municipal approvals of wireless and cellular infrastructure

should include an accommodation for emergency services. The Township should explore an ordinance that would, to the extent reasonable and legal, create restrictions and conditions around the implementation of small-node cellular technology which is now being implemented widely around the State and Country, including some installations in Bridgewater Township.

23. The Township should undertake an analysis of its Land Use Code section as part of future Master Plan Reexaminations to ensure consistency between sections and remove any obsolete provisions on a regular basis.

24. The Township should consider a Master Plan Element on the various Neighborhoods. This Element may make recommendations to refine neighborhood boundaries, define the prevalent architectural types and provide architectural standards within portions of these neighborhoods, and provide additional historical context to the various neighborhoods of Bridgewater Township. This will enable the Township and its residents to more efficiently retain the character of the communities that exist within its borders.

B. Recommendations Relating to Certain Zone Districts

1. Section 126-337.C of the ordinance, R-50 zone, Accessory uses should be amended to delete the last sentence which refers to 'accessory apartments. Accessory apartments are no longer a permitted use in Bridgewater. The accessory apartment use has been deleted throughout the ordinance, and this is an outlier that needs to be addressed.

2. The C-1 Neighborhood Business Zone currently permits, as a Conditional Use, the conversion of a single family detached dwelling along specific streets in the Finderne area, to two-family residences. The conditional use provision of Section 126-321.C(5) should be stricken from the ordinance since two-family dwellings have been removed from the other zones in the Township and no conditions are found in the ordinance.

3. This Master Plan reaffirms the previously approved Master Plan/Reexamination Report and ordinance which created a small expansion of the C-2 Zone across the highway onto Bridgewater-owned property.

4. Section 126-313 Conditional Use category in the C-3 Office and Service zone: The Ordinance should be amended for nursing homes and assisted-living facilities. Section 126-313(d) should reference that these conditional uses are permitted, pursuant to the standards of 126-309.2.B(3). This amendment will assign standards for the permitted Conditional use for which there are currently no standards.

5. When the Villa Restaurant was demolished, its lands were zoned as C-4, Office-Lodging Zone. The concept was to have single family lots associated with a mix-use non-residential component. The retail/service building, office and maintenance building were constructed on the west side of the site and the dwellings were built on the east side of the site about 15 years ago. Historically, this zone has been difficult to administer, particularly since it is controlled by two ordinance provisions, 126-313.2 and 126-347.2 (a Conditional Use).

   - The residential portion of the development should be reconsidered to be zoned R-20.1, which is the residential standard found in 126-347.2. B. Note that the abutting lands are zoned as R-20.1.

- For the west side of the site where both 126-313.2 and 126-374.2 apply, additions have been underlined and strikeouts are offered in order to distinguish the two districts. The zone designation of C-4 will remain, but the description will be changed to Neighborhood Retail and Office. Below are the proposed regulations for the non-residential uses.

C-4 Neighborhood Retail and Office

A. Principal permitted uses in this zone shall include:

(1) ~~All principal permitted uses found in the C-3 Zone.~~ Business, Professional and service offices and establishments, such as banking related functions, insurance carriers, real estate services, consulting services including educational services, professional offices such as engineering, architectural, accounting, medical offices, dental offices.
(2) Restaurants.
(3) Adult Medical Day Care
(4) Retail stores
(5) Gyms, rehabilitation facilities

B. Permitted accessory uses.

(1) Other uses and structures customarily incidental to a principal permitted use.
(2) Signs (see §§ 126-162 and 126-195) unless otherwise stated in this section.

C. Conditional uses.

(1) ~~Planned office/extended-stay lodging. See § 126-347.1.~~
(2) ~~Accessory retail services within professional business and research offices.~~
(3)Child-care centers a~~s part of professional business and research offices.~~
(4) ~~Mixed-use development projects (see § 126-347.2).~~

D. Area, yard and building requirements for the permitted uses in the C-4 Zone are as follows:
**Changes only to* (13)
(13) Maximum floor area ratio: ~~0.15~~ 0.25.

§ 126-347.2Mixed-use development projects.
Mixed-use development projects shall be considered a conditional use in the C-4 Zone and shall meet the following conditions and standards:
A. Mixed-use development projects shall provide for a combination of residential, office and retail uses with not more than 45% of the site area devoted to Permitted uses: retail and/or office uses. The FAR for office and retail uses shall be calculated utilizing the area of the entire development parcel which is dedicated for office and/or retail uses.
B. Permitted residential uses shall conform to the conditional use requirements of the R-20.1 Zoning District.
C. In determining those retail and office uses which are permitted in this zone, the Planning Board shall be guided by the permitted uses found in the C-1 Zone and C-3 Zone, respectively.
D. Development must take place as a single development project, although the Planning Board may allow for the development to occur in phases.
E. A comprehensive design plan shall be prepared for the proposed development.
F. All permanent utility lines, pipes and conduits shall be located below ground, and all other installations and appurtenances shall be adequately screened.
G. Area, yard and building requirements for the mixed-use development zone are as follows:

6. One of the Master Plan Policies is to have a 'living document' which addresses sustainable uses that emerge with changes in lifestyle trends. One such matter is that of the craft brewery (microbrewery) with a limited brewery license (1b). While the permitted principal uses of 'manufacturing' may be interpreted to permit the creation of a craft brewery, it would be well to specifically note it as a permitted use, along with identifying Permitted accessory uses associated with a craft brewery. The state considers brewing to be a manufacturing function, and this use is recommended for the M-1 Zone with the following Ordinance amendments considered:

- The authority to establish a craft brewery requires a manufacturing license from the New Jersey ABC.
- New Section, 126-317.1.A.(1)(a)[11]: Craft breweries with a New Jersey ABC Limited Brewery License (1b) brewing not more than 300,000 barrels of beer per year and operated in strict conformance with all other State regulations for craft brewery establishments.
- (Re-numbered) 126-317.1.A.(1)(a)[12]:M-1C Economic Development Option (See below)
- New Section, 126-317.1.A.(1)(b)[5]: Permitted accessory uses. An additional subsection should be added: (5) Limited retail for craft breweries in strict accordance with State craft brewery regulations.
- Add to Section 126-169 Craft brewery: 1 space per 300 gross square feet of brewing, tasting and warehouse space.

7. On Routes 202 in the western portion of the Township, the M-1 zone is developed as the Bridgewater Towne Centre shopping center, which should be rezoned to more accurately reflect the approvals and built conditions. The zone may also contemplate other potential uses for the shopping center that complement the existing uses.

8. On Route 22 in the western portion of the Township, the portion of the C-3 Zone to the east of the Route 28 intersection should be evaluated for a broader spectrum of permitted uses that consider the adjacent residential neighborhoods, as well as the highway corridor.

9. The M-3 zone should recognize governmental uses as a permitted use in this zone. Amendment to 126-319.A should be amended to add this use. It is also recommended that this zone be revisited in order to modernize the quarry ordinance and also to regulate uses for a meaningful and workable Reclamation plan.

10. MPD Zone; There is an inconsistency in the parking standards as shown in 126.321.1(C.2) which should be corrected. The parking chart should be amended as follows in order to be consistent with the Parking Requirements found in Section 126-169:

Use	**Number of Spaces**
Nursing Homes (Long Term Care units)	~~70 per bed~~ 0.7 space per bed
Residential Unit (Assisted Living	~~70 per unit~~ 1.25 space per unit)

11. There have been questions regarding the raising of farm animals on Bridgewater's residential properties. The right to keep farm animals on residential lots, including backyard pets such as chickens and horses are recommended for clarification of Section 126-333.B. The current ordinance

reads, "Livestock, poultry, fowl or other animals maintained on the premises for commercial purposes shall be permitted according to approved farm practices on property." It is recommended that Section 126-333.B should be revised to read, "*Livestock, poultry, fowl, horses and other farm animals maintained on the premises shall be permitted according to approved farm practices so long as the property conforms to the definition of a 'farm'.*

12. A new accessory use to be added to Section 126-333.D which states, "*Backyard chickens shall be permitted in the R-40 and R-50 zones. A maximum of four chicken hens intended to furnish eggs per residential lot in the back yard and side yard area only. No roosters shall be permitted at any time. The setbacks for structures and fencing shall be the same as that for an accessory use and accessory structure. Methods for sanitation will be approved by the Health Officer before the chickens shall be placed on the property. The Site Plan Waiver process can be used after the health officer has approved sanitation.*"

    Chickens of the genus Gallus are permitted. The following are non-chicken, bird animals, that are not permitted - which is not an exhaustive listing: Numida (all guinea fowl), Meleagris (all turkey) as well as all duck, all geese, all pheasant species, and the like.

    Other farm animals shall be permitted only on properties that conform to the definition of a 'farm.'

    The ordinance should also specify the definition of '*chicken*' since guinea hens, for example, are not intended to be classified as a chicken with the purpose of producing eggs for the household.

13. Section 126-339 should be revised to add this use to the chart:

Accessory Use:	Chicken coops not larger than 200 square feet and fences for a maximum of 4 hens
Lighting:	N/A
Site Plan Required:	Minor Site Plan Required for both coops and fences
Front Yard:	Not Permitted
Rear Yard:	X (Required to be located consistent with accessory structure setbacks)
Side Yard	X (Required to be located consistent with accessory structure setbacks)

14. Section 126-339 Agricultural uses, should eliminate the reference to horse barns. This will be handled more broadly in 126-333.A.

15. Section 126-333.A has no distance requirements for buildings and structures that relate to the raising of farm animals. The following underline shows where text has been added. This section should read:

"*Buildings and structures may be utilized to keep farm animals, and for horticulture, nurseries, greenhouses and for the growing, raising, harvesting and sale of agricultural crops, provided that no building or structure, other than fencing, shall be nearer than 100 feet to any lot line, except residential buildings, which may be located in conformity with the standards for residences within those districts in which they are located except that there shall be no harvesting of animals. Farm fencing setback shall conform to the setback requirement for accessory uses in the zone and shall be designed to prevent astray.*"

16. A registered 4-H project is permitted; the Health Officer shall approve the sanitation and the Applicant shall submit a Site Plan Waiver request for approval of the location of structures. The activity will remain as permitted so long as the activity is a 4-H registered project.

17. It is recommended that the Township study the need for Active Adult Community Uses in particular locations that have access to adjacent destinations. Specifically, the Township should investigate the Route 28 Corridor, the Martinsville neighborhood, the Finderne Neighborhood, and the Raritan Valley Golf Course. The properties within these areas that should be considered are recommended to be tracts with principal access to state or county roads. Additionally, the Township can consider an Active Adult Community (Conditional Use Overlay) Zone with specific standards related to Environmentally, Socially Sustainable Design, Streetscape Improvements, Amenitized developments, specific design standards to promote age-in-place, and Affordable Housing requirements.

18. The Active Adult Community (AAC) is intended to supplement and senior citizen living within the Township, with a neo-traditional-style housing development with a clear focal point. Refining and reshaping the goal toward a balanced suburban community, such as Bridgewater Township, should focus on reducing the degree of high-density residential development in favor of single family and small-scale, low-profile multifamily uses. As noted in the 2005 Master Plan, "Multi-Family Residential: Limit additional high density, multi-family developments to low rise, small scale senior citizen housing." To this end, Bridgewater Township's ability to remain a magnet for active adult living depends on its ability to attract and retain residents by providing exemplary and varied housing as well as offering key amenities for the diverse needs and desires of the mature adult population. It is important to have the zone and the location of the community provide a meaningful contribution to the existing success of Bridgewater Township and the balance of the existing success and high-value reputation that Bridgewater currently enjoys. Development should not only be an overlay option in residential neighborhoods, but it must also be a Conditional Use overlay option which requires full conformance with each of the conditions.

Key concepts underpinning the development of this Plan are to:

- Showcase sustainable site and building design;
- Emphasize excellence in all its dimensions and components;
- Introduce amenities and designs that will contribute to and support the needs of a mature adult community;
- Design the development to include elements that will:
    - Optimize fiscal benefits to the Township;
    - Enhance the sustainability of the unique community;

- Promote healthy lifestyles and encourage social interactions;
- Increase housing opportunity and choice of living styles.

To address these objectives, the Active Adult Community Plan proposes a distinctive place-making initiative of a creating a vibrant setting for an active adult community that is nested in an area of commercial services arrayed along a central boulevard. The result is the creation of a "village feeling" that is appealing to residents and business owners.

The following broad goals and more specific objectives will guide the Active Adult Community process.

- Promote and enhance economic health within Bridgewater Township. through design for high- quality development.
- Encourage diverse, low-density age-restricted residential and pedestrian-friendly uses consistent with smart growth planning principles.
- Bring new active adult residential uses in proximity to support services that will expand the level of activity within the Township.
- Establish a visually pleasing environment through high-quality social and architectural design standards. Areas of congregation must include furniture, visually pleasing views and focal point treatments.
- Create a pattern of internal streets that will not result in an increase in speed.
- Design the project to be environmentally, economically, and socially sustainable.
- Create a destination with an inviting streetscape, engaging public spaces, architecturally coherent and harmonious elements and interesting and varied uses.
- Maximize the sense of a nested village with traffic treatments such as a trail that links different interior spaces and provides an energized bike and pedestrian environment.
- Provide at least one centrally located, well-designed public space as a focal point.

19. The Township Ordinances should address the permitted outdoor dining uses that have been signed into law by S3608/A4866. It is recommended that this section address bulk standards and parking requirements.

20. Section 126 of the Township Code of Ordinances should be revised to consolidate certain site plan and design standards for requirements related to parking, signage, and landscaping, which presently appear in multiple code sections.

21. The Township should examine the permitted uses in the Highway Enterprise Zone (HEC). This Zone was changed 15 years ago with a vision for the Middlebrook campus, that has ultimately never come to fruition while zoning the existing uses into non-conformity.

22. The Zone Districts along Route 28/Union Avenue should be studied to determine the overlap between commercial and residential zones, as well as non-conforming uses.

C. Recommendations Related to Bulk Standard Requirements

1. Section 126-308.3(C3) should be amended to change the maximum FAR to 0.25 in order to be consistent with maximum 0.25 FAR for the R-10C zone as found in the Ordinance's Schedule of Area, Yard and Building Requirements.

2. The C-1 zone does not have regulations for setbacks for accessory uses. It is recommended that the Schedule of Area, Yard and Building Requirements chart found in Section 126-325 should be revised to require a minimum 20' setback from both front and rear setbacks for accessory uses.

3. The setback requirements for corner lots are addressed in 126-338 (E), but the language should be made clearer. It is recommended that the text should read, "*Location on corner lots. Buildings on corner lots shall not be located closer to any property line fronting along a street than the required minimum setback for front yards, as required in the zone in which the property lies.*"

4. The Township should consider language be added to the Ordinance to allow for exceptions in the case of emergency generators or air quality equipment for residential side yard and rear yard setbacks, or other setback considerations for corner lots. This equipment can provide life-safety services and emergency power, which serves a public need. The zoning permit should state the ordinance section used to grant this setback departure, and indicate that noise attenuation shall be required.

5. Although co-location for wireless communication facilities is encouraged, new wireless communication cell towers should have a site plan requirement for the Applicant to discuss alternative technologies. This information is not intended to be used as a basis for a Board decision, but rather is a means by which the Board and the public can become apprised of emerging technologies in the industry. Other zoning regulations, such as height and setback from roads, property lines and the like should be revisited in order to have new towers effect a minimal visual impacts on the Township.

6. There is a provision under the 126-2 Definition section for Improved Lot Coverage that addresses the setback of decks in the R-10A and R-10B zones. It states, "In zones R-10A and R-10B, the setbacks for decks may be reduced to 10 feet from the rear property line." It is recommended that the text be removed from the Definition section (126-2) and inserted in an appropriate location under Section 126-398.1, R-10A zone, as well as a new Subsection: 126-308.1B.5, under Supplemental Regulations and new Section 126-308.2A (5) Supplemental Regulations in the R-10B zone.

D. Recommendations Related to Other Land Use Ordinance Provisions

1. Assure that adequate roadway and sewer infrastructure is available for new development and adaptive reuse developments. Regulations should be considered for site plan applications which involve repurposing of buildings should conduct Infiltration and Inflow (I&I) studies on the lateral lines on their property and be required to repair any cracks or leaks that exist. Any

work shall be done in conjunction with and is subject to the review of the Township Engineer.

Ordinance Section 126-141 (Procedure for Site Plan Approval) should be revised to state that, "*All properties where commercial and multi-family Site Plan applications are submitted shall perform Inflow & Infiltration sewer studies as a condition of site plan approval. In such cases, the applicant shall repair all sections of the sewer which are shown to be defective before the issuance of a Certificate of Occupancy for the first structure seeking such certificate.*"

Additionally, the feasibility for Sewer Utility Capital Assessments should be investigated for any major development projects.

2. Promote policies intended to provide clean air and protection against the nuisance impacts of noise and light pollution. The Township should consider an Ordinance amendment to provide design standards that help to mitigate the impacts of air and light pollution.

   Section 126-160.B of the ordinance should be amended for site plans to state that all property lighting (other than security lighting) should be extinguished no later than one half hour after the close of business. As currently written, the lighting levels need only to be minimized at the close of business. The installation of timers, motion sensing devices and photo sensors can aid in achieving the objective of the ordinance, if necessary. The ordinance should be revised to state, "*Lighting within the parking areas, signage and within all commercial buildings shall be extinguished at the close of business or when employees are no longer on the premises. 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.*"

3. There have been nuisance complaints regarding residential lighting emanating from residential buildings and light poles on residential lots.

   Section 126-337 A (Accessory uses in residential zones) should be amended to address nuisance lighting and residential lighting standards.

4. Section 126-169 Parking, should be supplemented to include parking requirements for the various forms of Warehousing and also for the different forms of Manufacturing.

5. Parking stall locations are required for site plans, but the ordinance should specifically prohibit parking on any area that is not designated for parking. Prohibited locations should include lawn areas, driveways, aisles, gravel areas not designated on the site plan as a parking field. There should be no parking permitted in the minimum front yard area unless approved by the Planning Board or Zoning Board of Adjustment.

6. Ordinance Section 126-203B should be revised to read as follows: B. *The ~~Planning Board~~ Township Engineer may also authorize the issuance of a temporary certificate or permit if the following improvements have been bonded but not yet installed: landscaping, sidewalks, other similar improvements. Prior to the issuance of more than 50% of the development certificates of occupancy for a subdivision, all improvements shall have been constructed or installed unless there is a letter from the Township Engineer stating that circumstances beyond the control of the developer prevent such*

construction of installation, and specifying the reasons for the delay and the timeframe requirement for the construction or installation.

7. Ordinance Section 126-203C should be revised to read as follows: A building ~~permit~~ *certificate of occupancy* shall not be issued until all on-site improvements have been installed, including *assurance of accessibility for emergency vehicles*, except for the finish course of the road, monuments and trees, provided that the Township Engineer warrants that *a bond has been posted* and it is in the Township's interest to delay completion of the road, monuments and trees until after the ~~subdivider~~ *developer* has completed construction of dwellings and structures. The maintenance guaranty required hereafter shall not begin until the finish course of road, monuments and trees have been installed.

8. Section 126-258 (E) should be added to the Ordinance Section dealing with the Maintenance Bond requiring that: A *two-year timeframe for a required maintenance guarantee shall not begin until all the improvements have been installed and are declared to be acceptable by the Township Engineer and the Township Planner.*

9. The Township should provide a definition for short term rentals, and determine if any additional design or use standards should be considered.

10. Property owners are permitted to remove 3 trees per calendar year from their property. The difficulty is that exemptions are permitted for less than 3 trees, but the Township doesn't know what properties have used this exclusion and there is no tracking to assure that only one exemption is being taken during the calendar year. The Township should consider the feasibiltiy of an electronic tracking system. To this end, Section 126-278.5 should be revised. Currently written, the provision reads, "A permit is required for the removal of trees within the municipality unless exempted by § 126-278.4." The permit application process (for tree removal should be revised to state, "A permit is required for the removal all trees within the municipality. Exemption for payment of fees for the permit is found in Section 126-278.4."

11. Section 126-278.6 for tree removal permits, should be amended to read, "A *tree removal permit shall be submitted to the Township Engineer. The Township Engineer has the authority to require the actual re-planting of the trees by the applicant if the Engineer believes that there are other suitable sites to have installation of new trees*"

12. Many smaller-lot zones, e.g., R-10, R-10A. R-10B permit sheds less that are less than 100 square feet to be located 3 feet from the side and rear property line. The R-40 PURD lots are to be a minimum of 6,000 square feet but are required to be 10 feet (rear) and 15 feet (side) which is viewed as disproportional from what is permitted in the R-10 zones.

    It is recommended that Section 126-310 R-40 PURD Planned Unit Residential Zone should have a new Section 126-310 (B.2) of the ordinance which should read: "*Utility sheds less than 100 square feet in area and less than eight feet in height shall be permitted to be three feet from a side or rear property line.*"

13. Under Section 126-2, Definitions, a definition for Light Manufacturing should be added to the Ordinance section. This definition should read "*Manufacturing, Light. Process which involves processing, assembly, packaging*

and repackaging of material that is developed on site, but does not involve the refinement or chemical reconfiguration of bulk raw material."

14. A portion of Section 126-2, Definitions. Accessory Structure, should be amended to read, "B. *For purposes of this chapter, a garden or utility shed or structure shall be considered an accessory structure even if it does not exceed 10 feet in height as measured to the peak of the structure and it contains not more than 100 square feet, or less, of floor area, including any base or platform area. No such garden or utility shed shall be located closer than 10 feet to any property line nor within any part of any required front yard. There shall be no more than two accessory structures on any lot in a residential zone. Dog houses, children's play equipment, fences and flagpoles shall not be included as part of this restriction.*"

15. Section 126-339, Requirements for Specific Accessory Uses. Section 126-339.C currently reads, "C. *Accessory buildings, detached garages or storage sheds. The maximum size of such accessory uses shall be 1,000 square feet.*" The provision should be revised to read, "*The cumulative maximum size of all accessory uses for the lot shall be 1,000 square feet on the lot.*"

16. 126-341 Parking of Large Vehicles and Trailers in Residential Areas. Item D currently reads, "*Parking or open storage of noncommercial trailers or recreational vehicles in residential zoning districts shall be limited to one of the following; travel trailer, camper, motor home, horse or boat trailers or other recreational vehicles. These are to be garaged or placed to the rear or side of the principal building and are to be no closer than 15 feet to any rear or side property line.*"

    It is recommended that the Section should be revised to read, "*Parking or open storage of noncommercial trailers or recreational vehicles in residential zoning districts shall be limited to one of the following; travel trailer, camper, motor home, horse or boat trailers or other recreational vehicles. These are to be garaged or placed on a driveway to the rear or side of the principal building and shall be registered and operable.*"

17. Height and Location Requirements (Fences), Section 196-2. A (1) currently reads, "A. Location (setbacks) of fences shall be as follows: (1) *A fence must be installed a minimum of six inches set back from the property line and shall comply with the following:..*." The location (setbacks) of fences should be revisted to consider the distance that it can be installed in relation to the property line.

18. Currently, standby generators are not permitted within the front yard of any lot. A 'front yard' is the area between the building and the right of way. A minimum front yard setback is the minimum distance that a building may be set back from the right of way. Since some buildings are set back farther than the minimum setback requires, adjustment to the ordinance is recommended. Section 126-339.1(4a) Requirements for Specific Accessory Uses, currently reads, "A *permanent standby generator cannot be located in the front yard of any property.*"

    It is recommended that Section 126-339.1(4a) be amended to read, "A *permanent standby generator cannot be located in the required minimum front yard setback of any property.*"

19. Section 126-2 Definitions, should be updated to provide more nuanced and modern definitions for various types of warehouse, manufacturing, and distribution uses, as recommended by the State Office of Planning Advocacy Warehouse Siting Guidelines.

20. The fence ordinance has recently been amended to permit the installation of fencing along the property line. This has created concern regarding the direction of the swing of gates in the fencing which, in some cases, were installed so as to only be able to swing out – into the abutting property. The proposed ordinance amendment intends to correct this condition.

Amend Section 196 Fences and Retaining Walls by adding new subsection F to 196-3 Design Standards. The Design Standards shall read as follows:

F. *Gates installed within the line of a fence shall be made to be capable to swing into the owner's property and shall not swing over the property line on to abutting properties.*

21. Section 126, Attachment 1, Schedule 1 includes a note "B" which provides that "*Side and rear yard requirements may be reduced to 10 feet where the side or rear yard abuts an interstate highway or railroad.*" It is recommended that this condition be studied further to determine if it can be eliminated or amended. In particular, for uses that do not utilize the railroad or do not have a rail spur, the setback should not otherwise be reduced.

22. The definition for Floor Area Ratio should be amended, along with the corresponding definitions for Basement and Cellar. It is recommended that the latter utilize UCC definitions and that the Floor Area Ratio include all finished floors, with the exception of residential basements.

23. Section 126-2 Definitions. The Definition of Truck Terminal should read:
An area and/or building where trucks load and unload cargo and freight and where cargo and freight can be broken into smaller or larger loads for transfer. The term, Truck Terminal also includes the storage or parking of trucks, tractors and /or trailers awaiting use.

24. The Definition of Sign, Advertising as found in 126-2, should be amended to read, A sign which directs attention to a business, commodity, service or other facility conducted, sold or offered elsewhere than on the premises where the sign is located. A billboard is considered to be an Advertising Sign.

25. Signs on vehicles are sometimes placed in a prominent location on a parking lot for the purpose of advertising. An existing ordinance should be amended in order to solidify the intent of the ordinance. The amended Ordinance Section of 126-162 (D) should read, ~~Temporary~~ *Advertising messages placed on an unattended vehicle that can be easily read from the right of way shall be considered to be a sign if the vehicle remains in such a visible location more than 3 consecutive days.*"

26. The Township should conduct an analysis of the existing Conditional Use language for the HIC, GC, and HEC zones, which states that "All existing or approved new car, truck, construction equipment, recreational vehicle and farm machinery sales uses shall have the right to continue, the right to be enlarged on the existing lot to the limit permitted by ordinance and the right to be rebuilt if totally destroyed". As existing dealerships have modernized

and new car sales processes have changed, new car inventory has become a challenge and posed a hazard for deliveries occurring on Route 22. In the interest of encouraging lawful expansion on to adjacent properties, where available, the analysis should determine the possibility for existing car dealerships to expand onto adjacent properties and the necessary conditions to impose to ensure high quality use, adequate screening, and mitigate impacts to neighboring properties.

27. Shared surface parking lots and curb cuts between adjacent uses along Route 22 shall be encouraged for adjacent compatible uses that limit unnecessary trips out on to the highway. Where applicable, zones should make this an accessory use subject to valid access agreements.

E. Recommendations Related to Design Standards

1. The following design standards should be considered for non-residential building design along State and County roads. If additional standards are added, the Township should consider preparing a "Design Handbook".

General

- Solid face (blank) or unarticulated building faces visible from the roadway are not permitted. Where practical, the effects of mass and scale of buildings may be reduced by introducing staggered building walls, pilasters, or other architectural treatments.
- Building entries shall be readily identifiable through the use of canopy overhangs or other architectural features.
- HVAC units, generators, and solar panels and other structures that protrude through the roofline shall be kept to a minimum height and shall be screened so as not to be directly visible from the road or neighboring properties, as much as possible.
- Signs and Lighting. Where signs are permitted, they shall be made of materials and colors that blend into the basic architectural style of the buildings. Both pole mounted lighting and facade lighting shall utilize fixtures compatible with the architectural style of the buildings.
- Antennae projections on the roof of buildings shall be kept to a minimum height. The pole support for the antennae may be required to be screened.
- Buildings should be of low aspect with low parapets.

Building Materials

- Wall texture changes are encouraged, so long as it does not detract from the principal character of the building and are similar to or complementary to the more recent architecture established along the roadway.
- Design standard for non-residential buildings shall be brick, stone, clapboard,stucco or other materials in consultation with Township staff and professionals. Untreated metal panels and mirrored glass surfaces that form a substantial part of the building are not permitted.
- The building height shall be consistent throughout the building, without high parapet extensions.

- If several storefronts are located in one building, they should be unified in design treatment; e.g., the design of windows and door openings, the use of materials and color.
- Surface detailing should be integral with the structure rather than applied for decorative purposes.
- Where a building requires several different signs, they should be similar in size, materials, color and lighting.
- Recommended street furniture designs and preferred lighting standard should be selected by the Planning Board and Zoning Board of Adjustment.
- The design of all street furniture (benches, phone booths, trash receptacles, etc.) should be consistent with the overall building design concept.
- Plate glass widows shall occupy no more than 30% of the front elevation of the building facing the street, not including the parapet.
- Mansard roofs are not recommended.
- Plate glass windows will be visually broken by adding transom grillwork at the top of the window.

Color and Texture

- The colors of the building shall be subdued, earth tones. The painting of buildings in bold colors, patterns, checks or the use of buildings as signs is not permitted.
- Only earth tones should be used for exterior surfaces (browns, beiges, grays, soft greens). Accent, or complementary colors, harmonizing with the main color may be used for trim or awnings.
- Small-scale elements, such as accent colors around roofline, windows and doorways shall not be more than 10% of the building façade facing the roadway.
- Accent bands shall not be illuminated.

2. The Martinsville Special Design District simply recommends that rebuilding design, facade treatment signs, lighting and street furniture should be considered by the Planning Board in reviewing any projects. The ordinance does not, however, give a directive that deviation from the design standards constitute a design waiver for which the Board may compel closer conformance. It is suggested that the ordinance be strengthened to afford the Board the authority to improve the architecture of Martinsville by applying this ordinance.

3. The ordinance for the Martinsville Special Design District should be updated from its 1991 version to strengthen the roadway design standards. Since the application of these standards lie largely on a Somerset County roadway, Washington Valley Road, it is suggested that a grant for streetscape beautification and structure design from Somerset County be applied for.

F. *Recommendations Related to Neighborhood Designations*

1. A committee should be created to further refine neighborhood boundaries, define architectural standards within these neighborhoods and provide additional historical context to the various neighborhoods of Bridgewater Township. This will enable the Township and its residents to more efficiently retain the character of the communities that exist within its borders.

2. The Martinsville Special Design District simply recommends that rebuilding design, facade treatment signs, lighting and street furniture should be considered by the Planning Board in reviewing any projects. The ordinance does not, however, give a directive that deviation from the design standards constitute a design waiver for which the Board may compel closer conformance. It is suggested that the ordinance be strengthened to afford the Board the authority to improve the architecture of Martinsville by applying this ordinance.

PART 4

CONSERVATION PLAN

4.1 INTRODUCTION

Bridgewater Township has long expressed and pursued its objective to protect its natural resources while also meeting the local needs. This is accomplished by way of offering a broad range of business and service development options which control areas of use in order to protect the environment. To this end, the Township has enacted many controls which will conserve its precious natural resources. Patterns of conservation are seen throughout the Township, with the limitation of construction on steep slopes, introduction of buffer requirements and enforcement of tree replacement obligations. Providing added open space has been accomplished by offering the public with county open space, municipal open space and Homeowners' open spaces, tree-lined streets and well landscaped and maintained commercial properties. An important focus of conservation is that land management is a critical feature. Adherence to Best Management Practices go a long way in preserving the cherished landscape of Bridgewater Township and may require new regulations to achieve the purposes as outlined in the MLUL and in this Master Plan.

Air, water and soil are essential resources needed to support a healthy ecosystem. Development can disrupt the balance of environmental resources and place a strain on the ability of the ecosystem to sustain itself. Development can result in degradation of vegetation and water resources. Forested areas that may be cleared for residential and commercial uses will progressively alter the natural balance. In order to protect the quality of life for the Township residents, it is necessary to be committed to assure that the balance is not interrupted. Efforts should continue to be made to minimize degradation of natural resources. By respecting and preserving the natural systems of terrestrial and aquatic environments, the Township will endeavor to preserve a sustained healthy ecosystem.

Enabling language for restructuring regulations is specifically authorized by the Municipal Land Use Law. In 40:55D-2, Purposes. There are several purposes that directly relate to the importance of maintaining, conserving - and even restoring - the natural resources in the community. The purposes are summarized below.

Ordinance amendments are encouraged if it is seen that these purposes can be better attained if amendments are adopted. Below are the applicable Purposes as identified in the MLUL:

b. *To secure from fire, flood, panic and other natural and manmade disasters;*

c. *To provide adequate light, air and open space;*

e. *To promote the establishment of appropriate population densities and concentrations that will contribute to the well-being of persons neighborhood sections, communities and regions and preservation of the environment;*

g. *To provide sufficient space in appropriate locations for a variety of agricultural, residential, recreational, commercial and industrial uses and open space, both public and private, according to their respective environmental requirements in order to meet the needs of all New Jersey citizens.*

i. *To promote a designable visual environment through creative development techniques and good civic design and arrangement'*

j. *To promote conservation of historic sites and districts, open space, energy resources and valuable natural resources in the State and to prevent urban sprawl and degradation of the environment through improper use of land.*

l. *To plan for housing opportunities that meet the needs of changing residential demographics;*

n. *To promote utilization of renewable energy sources;*

o. *To promote the maximum practicable recovery and recycling of recyclable materials from municipal solid waste through the use of planning practices designed to incorporate the State Recycling Plan goals and to compliment municipal recycling programs.*

In the effort to offer recommendations that will achieve these objectives, the Bridgewater Township Environmental Commission met in May 2021 to consider current and emerging issues that affect the environment. The recommendations are summarized as follows and cover the range of issues addressed in this Master Plan section:

4.2 RECOMMENDATIONS OF THE BRIDGEWATER ENVIRONMENTAL COMMISSION:

1. Stream corridors: Promote the cleanup of the Raritan River and streams to remove obstructions.

2. Stream corridors: All site plan applications should require annual de-snagging of debris within streams on site, which can be enforced by an Ordinance amendment. Education on how to properly remove debris can be provided through video or materials that can be posted on the municipal website.

3. Stream corridors: Fertilizer and pesticides should not go into the streams, and education to reduce this can be provided through video or materials that can be posted on the municipal website. Natural fertilizers should also be encouraged.

4. Stream corridors: The cutting of trees is prohibited along streams by existing Ordinance. Vegetation along stream banks should also be retained, if living.

5. Storm Sewers: Discourage debris entering storm sewers, including prohibiting the discard of leaves on gutter line or in the road. Seasonal education could be provided on the cleaning of catch basin and could be promoted through the municipal website, newspapers and social media.

6. Stream corridors: Any site plan and subdivision applications should identify the responsibility for stream maintenance and health as a condition of approval. Where possible depending on the nature of the application, the maintenance responsibility should be included as part of the deed.

7. Stream corridors: Placing leaves, yard debris, etc. along stream corridors, including the stream itself, should be prohibited by ordinance.

8. Soil Erosion: The need for erosion control on public lands should be identified and addressed through volunteer efforts, if possible.

9. Trees: For applications involving the removal of trees to accommodate construction where there is not sufficient room for the replanting of new trees, the Environmental Commission continues to support the requirement to contribute to the Bridgewater tree fund per the Ordinance requirements.

10. Stormwater Infrastructure: For site plan and subdivision applications that include a detention basin, the maintenance manual/agreement should include provisions for required inspection and maintenance, and should have a fee associated with it from the owner so that Township can provide maintenance and repairs if it is not being maintained properly.

11. Vegetation: Invasive species should not be permitted for planting in the ground in Bridgewater. An Ordinance enforcing the planting of invasive species should be adopted.

12. Trees: Information for tree removal requirements should be more widely distributed to the public, which can be done through postings and reminders on the municipal website.

13. Road maintenance: For snow removal, where possible natural measures should be explored instead of sodium chloride or calcium chloride for road salt alternatives should be used for a natural materials. Brining measures ahead of storms should be considered on roads that have historically required particular attention.

14. Stormwater: Where site plans of adjacent municipalities have a potential impact on Bridgewater, the Township should review these development plans and coordinate with the adjacent municipalities on Stormwater designs that may negatively affect Bridgewater.

15. Streams and drainage ditches, with or without easements: These drainage ditches shall be maintained by the property owner so as to maintain the flow of storm waters. These should be cleared of debris at least twice a year and after each heavy rainstorm. Seasonal education and reminders should be promoted through the municipal website to encourage maintenance.

4.3 FORESTS

The scenic splendor of forested ridgelines and steep slopes are a hallmark of Bridgewater Township. The Master Plan strongly supports the conservation of forestlands due to its many benefits. In addition to the aesthetic appeal of a healthy woodland stand, forests offer opportunities for recreation, noise attenuation, wildlife habitat and air quality improvement. Forested lands also aid in the retention of soil to reduce surface runoff, reduce soil erosion and add oxygen to the air by means of photosynthesis. Tree canopies also attenuate the effects of strong sun rays and allow for understory and herb layers to flourish. Animal habitats are supported by forest stands where food and shelter are abundant.

Some of the forest species in Bridgewater Township are the upland mesic woodland which is also located throughout much of northern New Jersey. Woodlands in Bridgewater are also associated with wetlands and flood plain areas. Deciduous forests account for most of the natural woodlands in the Township.

Historic aerial photographs of the Township show that Bridgewater has a more extensive canopy than decades ago when the land was principally farmland. Yet, there is a need for understanding the importance preserving woodlands because of the many benefits that come from forests.

- Woodlands produce oxygen and contribute to the reduction of noise.
- Woodlands modify the local climate conditions, reducing temperature under the canopy.
- Woodlands support the ambiance of walking and hiking trails, creating an atmosphere of peace and stability.
- Woodlands aid in the reduction of surface runoff and hold the forest floor herb layer intact.
- Woodlands offer the ability for understory growth and will support animal habitats.

In addition to the woodlands themselves, there are other protective measures that should be employed in the effort to save the larger reaches of the woodland environment.

- Woodlands that foster habitats for threatened and endangered species should receive careful review when there is an application for even minor deforestation. In order to be successful, an inventory map should be developed for locations where there are woodlands.
- Wooded areas along slopes and corridors abutting open spaces should be protected.
- Efforts should be made to conserve even small patches of woodland if they form an environmental oasis or can be linked to other open spaces.
- Understory growth must not be removed in forested areas unless the growth is invasive species.

4.4 ENERGY AND AIR QUALITY

The quality of the Township's air is driven by conditions of regional, state, national and international conditions. Yet, there is the desire to improve New Jersey's air quality which presents a challenge that will obviously have a long-term effect on the well-being of the state. Since the 1967 Clean Air Act was adopted, New Jersey was initially behind in its position among many other states in meeting the National Ambient Air Quality Standards. Bridgewater has no monitoring stations of its own. Monitoring stations that contribute to the air quality data that affect Bridgewater are located in Middlesex and in Morris Counties. Ambient air quality for Criteria Pollutants in the Somerset County area is published by the NJDEP Bureau of Air Monitoring, where the 2020 data shows six pollutants that are tracked are carbon monoxide, nitrogen oxides, ozone, sulfur dioxide particulate matter and lead. According to the Air Quality Report, the Suburban Metropolitan Region was in 'the middle of the pack' of number of day reported as 'good' among the nine reporting regions. No days were ranked as 'unhealthy' or 'very unhealthy.'

On balance, ozone is the most common pollutant that has recommended limits exceeded in the state. Ozone results when the nitrogen oxides from vehicular emissions and other sources react with warm temperatures and ultraviolet light. It is highly dependent on meteorological conditions.

Another pollutant that significantly influences air quality (carbon monoxide, particulates and traces of sulfates, nitrates, metals and others) is found in diesel exhaust. Sources include trucks, construction vehicles and busses' automobile emission. Carbon monoxide is a localized pollutant which levels depend largely upon the number of vehicle trips, trip times, distances and travel speed.

4.4.A ELECTRIC VEHICLE READINESS PLAN

Somerset County Master Plan has given an introduction of its position on energy reduction through the establishment of an Electric Vehicle Readiness Plan:

"In March of 2018, Freeholder Mark Caliguire created the Somerset County Electric Vehicle Implementation Task Force. The Task Force's goal was to develop a plan to make Somerset County the model for supporting the use of electric vehicles.

The Task Force was convened by Freeholder Caliguire with members from County Staff, the Somerset County Energy Council, the Somerset County Business Partnership and the North Jersey Transportation Planning Authority. Somerset County recognizes the growth in adoption of electric vehicles (EVs) and the wide range of benefits of the technology. By preparing an Electric Vehicle Readiness Plan, the County goal is to reduce its fossil fuel use, support a healthy environment, support economic development, attract residents and business, and continue to be viewed as the leading model for sustainability and excellent governance. The County intends to be a leader in advancing electric vehicles in the same way it was a leader when it purchased hybrid cars for its fleet starting in 2004. Based on the latest fleet numbers from NJDEP, Somerset County has the largest fleet of hybrids of any county or municipality in the state."

Subsequent to the actions in Somerset County, on July 2021, Governor Murphy signed a law P.L. 2021, c. 171 E which amended the MLUL and became effective immediately regarding EVSE parking requirements. The law states that Make-Ready (electric charging infrastructure) and electric charging stations (EVSE) must be provided for Site Plans. Some of the following is required by the amendment. The Planning Board or Zoning Board of Adjustment must require compliance with the law for all preliminary approvals.

a. Install at least 1 Make-Ready equipped or EVSE parking space if there are 50 or fewer spaces.
b. Install at least two Make-Ready parking spaces if there will be 51 to 75 off street spaces.
c. Install at least three Make-Ready parking spaces if there will be 76 to 100 off street spaces
d. Install at least four Make-Ready parking spaces if there will be 101 to 15 parking spaces
e. Install at least 4% Make-Ready parking spaces if there will be 151 or more off street spaces.
f. A Make-Ready equipped or EVSE parking space may count as 2 parking spaces so long as the total required spaces does not result in a reduction more than 10% of the total required parking.

There is also a requirement to convert Make-Ready spaces into full EVSE spaces over time. An important addition to the law is that a site plan for installation will not be required, unless the installation conflicts with bulk requirements applicable to the property.

Since Somerset County is at the crossroads of two major interstate highways (I-287 and I-78) and many other highways, it is poised to be known as an EV charging hub for north and central New Jersey. In 2017, the New Jersey Department of Environmental Protection, working with the Federal Highway Administration, designated the I-78 and I-287 corridors as plug-in electric vehicle charging corridors. These highways will receive signage to alert motorists that charging stations are located near the highway.

There have been EV installations in Bridgewater Township that are privately available in certain office parking lots, as well as available to the public, such as the Wawa on Route 28 adjacent to the Promenade Shopping Center.

4.4.B ALTERNATIVE ENERGY

Electric vehicles are becoming more popular, and as a result of their increased presence on the roads, these drivers have a growing need for reliable and intermittent charging sources.

The Department of Energy defines electric-drive vehicles as those that "use electricity as their primary power source or to improve the efficiency of conventional vehicle designs." Within this definition, electric-drive vehicles fall into three main categories:

- **Hybrid electric vehicles (HEVs)** are powered by a traditional gasoline or diesel internal combustion system (ICE) and by an electric motor that uses energy stored in a battery. The battery is charged by the ICE and through regenerative braking. The electric motor provides extra power during starts and acceleration, allowing for a smaller engine. This results in better fuel economy without sacrificing performance.

- **Plug-in hybrid electric vehicles (PHEVs)** are similar to HEVs but have a larger battery that allows it to travel on electricity alone. The battery can be charged by plugging into an electric power source, through regenerative braking, and by the ICE. They can be fueled solely with gasoline, like a conventional HEV. However, they will not achieve maximum fuel economy or take full advantage of their all-electric capabilities without plugging in.

- **All-electric vehicles (EVs)** run on electricity alone. They are powered by an electric motor that uses energy stored in a battery (larger than the batteries in an HEV or PHEV). EV batteries are charged by plugging the vehicle into an electric power source and (to a lesser degree) through regenerative braking.

For the purpose of this Master Plan, the EV, PHEV and HEV are all referred to as EV.

4.4.C SOLAR ENERGY

Capturing and converting solar energy is another readily-available means of using an alternative energy source.

A few of the larger-scale solar fields are noted, which shows the strong commitment that Bridgewater Township and its community has for energy responsibility. Roof-mounted solar facilities are not considered here:

Municipal Complex on Commons Way	Ground-mounted solar over turf
Bridgewater Board of Ed. on Garretson Rd.	Ground-mounted solar over parking
Bridgewater Commons Mall	Solar over parking carport
Senior Citizens Center on Somerville Rd	Solar over parking carport
400 Crossing off North Bridge Street	Solar over parking carport
Higgins on Candlewick	Ground-mounted solar over turf
Hind & Fore on Route 28	Ground-mounted solar over turf
VoTech on Vogt Drive	Solar over parking carport
Former American Starch, Finderne Ave.	Solar over parking carport
Middle School on Merriwood Lane	Solar over parking carport
YMCA on Garretson Rd.	Solar over parking carport
Wawa off Chimney Rock Rd.	Solar mounted on fueling station canopy
DPW facility on Chimney Rock Rd.	Solar over parking carport (partial)
Somerset County on Polhemus Lane	Solar over parking carport
Hamamatsu on Foothill Rd. and Ronson	Solar over parking carport
Somerset County off of Finderne	Ground mounted over gras

4.5 LIGHT POLLUTION

The State Development and Redevelopment Plan recommends that, "In the interest of improved safety, energy conservation and maintenance of environmental integrity, outdoor roadway and area lighting should be designed, installed and maintained to minimize misdirected and upward light and optimize the use of the lighting system." In meeting this objective, Bridgewater has adopted ordinances that establish standards for illumination levels at the property line and within the limits of the property based on the number of footcandles.

4.6 SOILS

Soil types vary widely and have differing characteristics. The Fish and Wildlife Service subdivides soil into three basic categories, called Groups. These 3 Groups have different characteristics. Group 1 are soils that most often display a hydric characteristic which is necessary for a wetland environment. Group 2 contains hydric conditions in most places, but field verification is needed to confirm the hydric nature of the soil. Group 3 may also display hydric conditions, but this condition is found only in a few places. Hydric soils are identified here and some discussion is provided regarding the qualifying criteria for declaring a soil as a wetland. The Soil Conservation Service provides a geologic profile, as described in the list below:

Abbottstown Series (Aba)	This soil is comprised of somewhat poorly drained, loamy soil with a fragipan (which is a restrictive layer) developed in the lower subsoil. It occurs in nearly level to gently sloping areas. These soils are saturated within 1.5 feet of the surface. (this is a characteristic that supports the wetland environment) in the fall, winter and early spring due to the presence of seasonally high perched water table. (A perched water table means that the water coming from the surface is trapped on top of a restrictive layer, such as a clay layer.)
Amwell Series (AmB, AnB)	The Amwell series consists of moderately well drained and somewhat poorly drained soils with a firm fragipan (an altered subsurface layer that restricts water flow and even root penetration) developed below 21 inches. These soils occur on gentle and strong slopes. They have a seasonal high-water table perched at a depth of 1 to 4 feet from winter until early spring. The somewhat poorly drained groups of these soils are occasionally associated with wetlands.
Bowmansville Series (Bt)	The Bowmansville series consists of poorly to somewhat poorly drained, clayey-silty, loamy soils. These soils have formed in a glacial till and granitic gneiss. They occur in depressions and on floodplains, where they are subjected to very frequent flooding. In some locations, this soil is found at higher levels, which are seldom flooded, but

	with no ponding. Most flooding takes place with the summer or fall flooding due to heavy storms.
Cokesbury Series (CpB)	Cokesbury soils are poorly drained, loamy soils with a moderately well-developed fragipan at 21 to 32 inches. In some areas, these soils are very or extremely stony. They occur in waterways and depressions as well as in gently sloping areas. A perched water table is within 1 foot of the surface from September to June.
Croton Series (CrA)	The Croton series includes poorly drained, loamy soils with a fragipan present at 19 to 33 inches. It forms in hillside seepage areas, in slight depressions on upland flats and along drainageways where it remains wet until late spring. A perched water table is 1 foot from the surface during winter and spring.
Klinesville Series ((KIC, KID, KIE)	Klinesville consists of shallow, well drained soils on narrow divides and rolling uplands. They are from weatherd red shale. Before suburbanization the soils were primarily used for pastures or woodland. The fertility is characterized as medium.
Lamington Series (La)	Lamington soils include poorly drained, clayey and silty loam soils with a well-developed fragipan at a depth of 23 to 45 inches. They occur on stream terraces in old ox-bows and meandering streams. Water may temporarily pond on the surface. A seasonal high-water table tis perched above the fragipan during the winter and early spring.
Lansdowne (LbA, LbB)	Lansdowne soils are nearly level and found in low lying areas on broad upland flats and in depressions and drainageways. Runoff is very slow and the hazard of erosion is slight. Lansdowne soils exhibit a seasonally high-water table at a depth of 1 to 2.5 feet.
Parsippany Series (Ph)	Parsippany soils are poorly drained, silt loam soils that formed in stratified glacial lacustrine deposits. Where located along major streams and rivers, these soils are often subject to flooding. The water table is at or near the surface of the ground from winter through early spring and falls down to 3 or 4 feet in the summer. Ponding is likely to occur during heavy rain periods.
Penn Series (PmB, PmD PnC)	Penn soils aare vey shaly and the shale fragments comprise ladd thatn 5 percent of the surface layer. Runoff is slow and the hazare of erosion is slight. Before suburbanization the soil was used mainly for corn soybeans and small graing.

Raritan (RbA)	The Raritan series consists of deep, moderately well drained and somewhat poorly drained, nearly level to gently sloping soils. These soils ae on-stream terraces. The lowest areas and areas near the confluence of waterways ae subject to overflow about one in 50 years. Seasonally high-water table is ½ to 3 feet
Rowland Series (Ro)	Rowland soils are deep, moderately well drained and somewhat poorly drained soils. They occur on floodplains of rivers and major streams. Due to this position, they are subject to frequent flooding. In lower positions, they may be flooded for long enough periods to support wetland vegetation.
Urban Land (Um)	This soil consists of land which has been so reworked during urbanization activities that the original characteristics of the soil are no longer distinguishable. These are often found in areas abutting roadways where the disturbance is significant.
Watchung Series (We)	The Watchung series includes poorly drained, loamy soils. In some areas, these soils are very or extremely stony. These soils are found in low places and on gentle slopes. They are wet most of the year, with a seasonally-high water table at or near the surface from late fall through early spring.

4.7 GROUNDWATER

Regardless of whether residents and commercial businesses receive their potable water supply from a public water system or from a well, the groundwater system is still critical to the health of the community. Groundwater supplies flow to rivers and streams. It supports avian, terrestrial and aquatic life that is important to the environmental stability of the Township.

Since some dwellings in the Township still rely on private septic systems, the Township, through its Health Officer, should ensure that septic tanks are regularly pumped and maintained in a manner that does not degrade groundwater quality.

Public information forums should focus on water conservation and preventing discharge of hazardous materials into the waterways or onto the ground. Sites for disposal of hazardous wastes should be advertised on the municipal website.

The following sources for pollution should be mapped so that the inventory can be used by the several municipal departments who would have need for this information.

- Hazardous substance storage areas and buildings

- Permitted NJPDES groundwater and surface discharge operations
- Gas and fuel storage locations
- Sewer line locations
- Underground storage tanks
- Septic system locations

4.8 WETLANDS

Freshwater wetlands filter contaminants from the surface water as well as the groundwater. The state and federal governments have taken on the duty of regulating wetlands, floodplains and the buffers that are associated with these wetlands (wetland transition areas.) Wetlands retard the flow of stormwater and reduce the effects that would otherwise be experienced by soil erosion. Wetlands trap sediments and retain nutrients for uptake.

The NJDEP maps and the SCCS maps depict hydric soils. These maps are valuable resource tools in developing land use management strategies. It should be noted that field investigation is needed for the wetland delineations where the three-parameter criteria for determining of wetlands is needed.

The three criteria that are required for determination of a wetland are:

- Hydric soils which are soggy soils
- Hydrophytic vegetation which are water-loving vegetation
- Hydrology which means an environment of water

4.9 STEEP SLOPES

Protecting steep slopes constitutes sound environmental stewardship. The benefit of

retaining steep slopes is widely accepted as an advantage to the environment. Uncontrolled disruption of steep slopes can produce soil slippage. While the ordinance requires an inventory of the steepness of slopes on property, it does not require that development be located on the areas of lesser slopes. Clearing or development on steep slopes produces a variety of environmental impacts, including the removal of trees. A currently-used design is to disturb the slopes by installing terraces. The impact of this is that there is often a great deal of tree removal needed for construction of the terraces.

When steep slopes are not protected, the following may occur:

- Increased soil erosion and sedimentation
- Altering the surface of the ground, pitting the surface and creating deep trenches
- Increased overland flow of waters
- Decreased groundwater recharge
- Decreased surface water quality
- Decreased soil fertility.
- Potential undermining of structures such as roads and sidewalks due to flows
- Affecting off-site conditions due to the uncontrolled nature of stormwater.

4.10 STREAM CORRIDORS AND SURFACE WATERS

Management of stream corridors has received a great deal of national attention. Stream corridors include many landforms such as swales, intermittent streams and channels. Much of the Bridgewater boundaries with adjoining municipalities lie along streams or rivers. Common borders with the Raritan River include Middlesex Borough, Bound Brook Borough, Manville Borough, Hillsborough Township, Branchburg Township and Bedminster Township.

Local regulations from these municipalities could help to maintain or to install a vegetated buffer along the stream to filter surface water pollutants before they reach the Raritan River. Mature vegetation also shades the stream and helps moderate temperatures by preventing solar radiation from affecting the water temperature. Preserving the corridor habitat protects the environment adjacent to the stream and aids in maintaining a healthy wildlife habitat.

When steep slopes are not protected, the following may occur:

- Increased soil erosion and sedimentation
- Altering the surface of the ground, pitting the surface and creating deep trenches
- Increased overland flow of waters
- Decreased groundwater recharge
- Decreased surface water quality
- Decreased soil fertility
- Potential undermining of structures such as roads and sidewalks due to flows

- Affecting off-site conditions due to the uncontrolled nature of stormwater

National water quality goals were established in the Federal Clean Water Act. These goals provide that surface waters should be fishable, swimmable and potable, after reasonable treatment. The national goals are reflected in the designated uses of waters established in New Jersey's Surface Water Quality Standards (which establish the goals and policies that guide management of the state's water quality and designate the use of water and establish protective policies) and the water goal statement developed by the National Environmental Performance Partnership Agreement.

In order to improve the quality of water that traverses the Township, storm water management is an important element. Stormwater management not only includes the engineering design of a system, but also the maintenance of it from the standpoint of point and non-point pollution. The point source pollutant comes from an identifiable source such as a broken sewer pipe at a commercial building. A non-point pollutant source is one where the source of the pollution cannot be identified.

An engineered Maintenance Plan is mandatory for any project with a Stormwater BMP subject to the Stormwater Management Rules of N.J.A.C. 7:8 and includes all of the items identified in N.J.A.C. 7:8-5.8. Once implemented, general maintenance, preventive maintenance and corrective maintenance should be performed to assure the continual function of the system. (N.J.A.C. 7;8-5.8(b) and (e). This includes repairs, removal of sediment, debris and trash, restoration of eroded areas and restoration of vegetation. The following should be included in any Stormwater Maintenance Plan:

- Sediment removal should take place when an inlet or outlet structure is dry. Sediment, trash and debris should be properly disposed of so that it will not migrate back into the system.
- Areas intended to access to the storm water management facilities shall be kept clear.
- Maintenance task may require the entry of an inlet/outlet structure or manhole.
- Maintenance is required to be performed by qualified personnel in accordance with OSHA requirements. The personnel should have Confined Space Entry training and certification.
- All state and Federal laws and safety instructions provided by the manufacturer must be complied with.
- Land surrounding Middlebrook and Cuckhold's Brook should be explored for future uses/conservation efforts.

The person responsible should be identified and should keep a log of maintenance activities (N.J.A. C. 7:8-5.8(f). The responsible maintenance person should evaluate the effectiveness of the stormwater management system and adjust the plan to maximize its effectiveness.

- Whether inspection have been performed as scheduled.
- Whether the preventive maintenance has been performed as scheduled
- Whether the frequency of preventive maintenance needs to be increased or decreased.
- Whether the planned resources were enough to perform the maintenance
- Whether repairs were completed on time.
- Whether inspection maintenance and repair records have been kept.
- The responsible maintenance person should make all records available to the Township.

4.10.A Point Source Pollution

1. Water quality degradation happens downstream of the point where the polluting discharge occurs. Bridgewater Township has facilities that require a NJ Pollution Discharge Elimination System NJPFE permit and is under the jurisdiction of the state.
2. Malfunctioning grease traps at restaurants are another potential source that is currently monitored by the Health Department, but the many restaurants that are located in the Township require constant monitoring.

4.10.B Non-Point Source Pollution

1. Septic Systems contain anaerobic bacteria, pathogens and household products disposed in the wastewater. The malfunction of a septic system could cause overland flow of polluting effluent that affects the ground and surface waters. Pumping out the septic system every 3 years is considered to be a good management practice that will maintain the septic system in good operation. This is another reason that septic systems should be monitored and connected to public sewers, where warranted.
2. Construction Activity can produce sediment loads by two to ten times over pre-development conditions, sending the sediment-laden water to water bodies. Suspended sediments increase turbidity which affects fish and aquatic invertebrate respiration, reduces spawning and smothers the animal life associated with the bed of streams. Soil Erosion mats and barriers, installed before construction activity, can attenuate the negative sedimentation effects of construction activity.
3. Urban Stormwater Runoff can increase the pollutant loading by at least 100% over pre-development conditions. These pollutants include greases, automobile oils, pesticides, fertilizers, animal waste, road deicing agents and many other pollutants. Rainfall washes these pollutants into catch basins which direct the runoff to surface waters.
4. Agricultural Runoff from croplands is also a potential significant source of non-point pollution. This pollution can be in the form of erosion or herbicides, fertilizers and pesticides. Buffer strips are strategies that can slow the waters and filter the sediment and pollution.

5. Residential lawn runoff can contribute to the pollution load if lawn management includes fertilizers and herbicides. Un-mowed grass strips, grassed swales and rain gardens may help reduce the impact of these pollutants.

4.10.C Detention Basins

Bridgewater has adopted a stormwater management standard which regulates the amount and flow characteristics that are discharged from a development site. In order to be consistent with state standards, the Township also regulates the water quality enhancement for the discharge waters. This is accomplished by the physical settling out of sediments. This allows adsorption and absorption of suspended pollutants as well as soil particles.

Basins can be wet basins or dry basins in order to meet the water quality standards. Wet basins create a 'pond' which also offers aquatic and amphibian habitats. Vernal pools are sometimes introduced into the basin design to give amphibians a greater potential for survival.

4.10.D Porous Pavement

Porous pavement can remove or trap soluble and fine particulate pollutants carried by stormwater. By allowing the runoff to penetrate through the pavement, stormwater permeates into the soil. This type of treatment works well in high-volume parking areas but it is not recommended for soils with a high clay content. For all its benefits, there are also demanding obligations for maintenance. Inspection and measures to ward against clogging are needed. The difficulty and cost associated with maintenance should be factored into the long-term cost of the facility.

4.11 THREATENED AND ENDANGERED SPECIES

Bridgewater has a wide set of conditions that lend themselves to providing permanent habitats for threatened and endangered species, such as the threatened barred owl, pictured. With its streams, tributaries, lake, deciduous and non-deciduous trees, the character of the landscape is particularly favorable to support aquatic, bird, and terrestrial animal life. Continual commitment to land stewardship favors permanent residency for these animals. Several threatened and endangered species have been sighted in Bridgewater.

Below is a list of all species that are designated as threatened and endangered by the Division of Fish and Wildlife listed by common names. It should be noted that not all species listed exist or inhabit Bridgewater specifically.

Reptiles in New Jersey

Endangered	Threatened
Rattlesnake, timber	Snake, northern pine
Snake, corn	Turtle, Atlantic green**
Snake, queen	Turtle, wood
Turtle, bog**	
Hawksbill, Atlantic**	
Leatherback, Atlantic**	
Ridley, Atlantic **	

***= Listed Federally as endangered or threatened*

Mammals and Fish in New Jersey

Endangered	Threatened
Bat, Indiana**	Sturgeon, Atlantic**
Bobcat	Sturgeon, shortnose**
Whale, North Atlantic right**	
Whale, blue**	
Whale, fin**	
Whale, humpback**	
Whale, sei**	
Whale, sperm**	
Woodrat, Allegheny**	

***= Listed Federally as endangered or threatened*

Birds in New Jersey

Endangered	Threatened
Bittern, American [BR]	Bobolink [BR]
Eagle, bald [BR]	Eagle, bald[NB]
Falcon, peregrine [BR]	Egret, cattle [BR]
Goshawk, northern [BR]	Kestrel, American
Grebe, pied-billed [BR]	Lark, horned [BR]
Harrier, northern [BR]	Night-heron, black crowned [BR]
Hawk, red-shouldered [BR]	Night-heron, yellow-crowned
Knot, red [BR]	Osprey [BR]
Owl, short-eared [BR]	Owl, barred
Plover, piping**	Owl, long-eared
Rail, black [BR]	Rail, black[NB]
Sandpiper, upland	Sparrow, grasshopper [BR]
Shrike, loggerhead [BR]	Sparrow, Savannah [BR]
Skimmer, black	Woodpecker, red-headed
Sparrow, Henslow's	
Sparrow, vesper [BR]	
Tern, least	
Tern, roseate**	
Warbler, golden-winged [BR]	
Wren, sedge	

*BR=Breeding population only; NB = non-breeding population only; **= Listed Federally as endangered or threatened*

Invertebrates in New Jersey

Endangered	Threatened
Beetle, American burying**	Baskettail, robust (dragonfly)
Beetle, northeastern beach tiger**	Clubtail, banner (dragonfly)
Cooper, bronze	Clubtail, harpoon (dragonfly)
Floater, brook (mussel)	Elfin, frosted (butterfly)
Floater, green (mussel)	Emerald, Kennedy's (dragonfly)
Petaltail, gray (dragonfly)	Floater, triangle (mussel)
Satyr, Mitchell's (butterfly)**	Fritillary, silver-bordered (butterfly)
Skipper, arogos (butterfly)	Jewelwing, superb (dragonfly)
Skipper, Appalachian grizzlied (butterfly)	Lampmussel, eastern (mussel)
Wedgemussel, dwarf**	Lampmussel, yellow (mussel)
	Pondmussel, eastern (mussel)
	Snaketail, brook (dragonfly)
	White, checkered (butterfly)

***= Listed Federally as endangered or threatened*

Amphibians in New Jersey

Endangered	Threatened
Salamander, blue-spotted	Salamander, eastern mud
Salamander, eastern tiger	Salamander, long-tailed
Treefrog, southern gray	Treefrog, pine barrens

In addition to avoiding development that may put animal life in jeopardy, standards for land management of rare, endangered, unique or desirable plants should also be made part of land use regulations. Protecting the wetland and upland areas and protecting these species helps to maintain the ecological stability of woodlands, wetlands and transition areas. In sum, preservation of these precious habitats is good land stewardship which is in keeping with the conservation objectives endorsed by the State Development and Redevelopment Plan and the MLUL.

4.12 RELATIONSHIP TO OTHER MASTER PLAN ELEMENTS

The Conservation Plan Element works seamlessly with the Land Use Plan, which offers measures that deal with the wide range of residential densities and non-residential uses. It has been emphasized that conservation must occur on all levels of domestic and commercial uses and must have all municipalities and counties contributing their efforts toward conservation. In this way, a cohesive approach to solving potential problems is achieved. The Conservation Plan promotes resource management for both of these levels and will assure that the environment will be healthy, regardless if it is in a residential neighborhood or in a dense retail area or in an industrial campus.

4.13 CONSERVATION PLAN RECOMMENDATIONS

1. In regards to EV parking requirements, the Ordinance should be amended to conform to the requirements set forth in P.L. 2021, c. 171 E and as provided under the DCA Model Statewide Municipal EV Ordinance.

2. The following added zoning considerations should be incorporated into the EVSE requirements for Bridgewater, as far as they are permitted via the Model Ordinance sections:

    - Every gasoline fueling station should be encouraged to have at least one electric charging station. The approval process for installation shall be through the Site Plan Waiver process.
    - Electric vehicle charging stations on larger public and private parking sites shall be dispersed, if possible, within each separate type of parking facility providing electric vehicle charging to the maximum extent feasible.
    - The Ordinance should include tracking of Make-Ready equipment so that they are converted to full charging stations in accordance with the timeframe set by law.
    - The Ordinance should include a requirement to provide an Emergency Response Plan to the Police Department, the Office of Emergency Management, the Local Fire Company and any relevant Emergency Medical Service providers.
    - The installation of a charging station can be accomplished by a Site Plan Waiver application.

3. The Township should consider an Ordinance provision that sets forth a requirement for a lighting certification that states that the lighting levels are in accordance with the approved plans and are safe for pedestrian and vehicular movements. This certification has being required on an informal basis before the Planning Board or Zoning Board of Adjustment, but it should be formally embodied in the ordinance.

4. The ordinance should be amended for commercial and for residential uses to state, "In the event that a light source is determined by the Township Engineer to be a nuisance to nearby property owners or to drivers on the roadway, the Township Engineer shall have the authority to require that the offending light source be shielded.

5. Sign lighting should be specific to the illumination of the sign and the ordinance should state that sign illumination must not intrude into the surrounding areas.

6. In an effort to reduce night light pollution, architectural façade 'wash' lighting should not be permitted for commercial buildings.

7. While the ordinance requires an inventory of the steepness of slopes on property, it does not require that development be encouraged on the areas of lesser slopes. The ordinance should require that the applicant describe efforts to locate improvements on the lesser slopes.

8. The Watchung second ridge has been the focus of a 25-year open space project for a regional preservation. The purpose is to preserve the steep slopes, ridgeline and woodland associated with the Watchung second ridge. This is a fee-simple land acquisition and easement acquisition program that lies along Bridgewater, Warren, Bernards, Bedminster, and Far Hills. It stretches from Basking Ridge and extends through these municipalities as well as the Watchung Reservation and through Union and Essex counties to the north.

   In 1976, the Second Watchung Mountain Study Group was created. Somerset County has taken on a major commitment to acquire property in the entire stretch of land. Just after the formation of the Study Group, a map of properties to acquire was created by the County Planning Board. Public funds were assembled and Green Acres grants were obtained for land acquisition. Over the years, the County has partnered with Bridgewater, Bernards, Bedminster and Warren Townships to facilitate the purchase of lands along the Second Watchung ridge. In some cases, fee simple purchase could not be negotiated, so easements were purchased instead. In some cases, the Bridgewater Planning or Zoning Board of Adjustment received easements as part of development applications.

9. Encourage green building designs by acknowledging energy-efficient buildings that are constructed within the Township.

10. Encourage Somerset County to more vigorously promote an effective program of recycling and the use of renewable energy sources.

11. Encourage keeping and maintaining the understory of forests along streams so that small trees, scrub and herb layers are kept so that a healthy animal ecosystem can thrive. This would require a commitment to a woodland conservation strategy which could be added to Section 126-331 of the Ordinance. The amendment to 126-331 includes new provision D, which is shown in underline below:

    §126-331 Drainage/conservation easements for streams and other bodies of water.

    D. No understory growth shall be removed from the area 50 feet either side of the top of bank of a stream.

12. Open spaces that have been subject to forest removal should be the subject of a reforestation project. Sources of funding should be explored including NJDEP which has a series of funding programs, some of which may assist in providing reforestation and tree planting.

13. Associated with forest retention, the Middlebrook Trail is an asset that should be conserved and promoted for hiking.

14. The ordinance should be strengthened to encourage preservation of woodland habitats.

15. Rain gardens should be encouraged if the characteristic of the soil is favorable and if the owner appears to be willing to conduct the continual maintenance that this form of garden requires.

16. The Township should monitor the sources of potential point and non-point pollution and address mitigation measures that may cure the condition of the pollution

17. Residential subdivision approvals that require stormwater management detention facilities, such a detention basin, should be designed to capture runoff from the maximum permitted lot coverage in the zone, unless a bulk variance is sought for additional coverage allowance. Subdivision plans are not required to show the actual future development, and thus any concept may only show a small portion of the actual permitted development per the zoning bulk standards. This requirement would allow for the proper design of stormwater management facilities and determine the area of the property required for these facilities.

18. The existing Ordinance has guidelines for development on steep slopes. It is recommended that an application form be created to demonstrate that any proposed development on steep slopes (>10%) be accompanied by an engineering summary that addresses the steep slope development requirements of the Ordinance.

19. In the review of development plans, the design should be encouraged to stay away from significant wetlands and transition areas. The distance could be determined by formal engineering study.

20. Where there may be future confusion of the particular limits of a protected wetland or transition area, some form of field marking should be required to demarcate the unrestricted area from the wetland and transition protected area. Posts or trees can be used for this demarcation.

21. Formation of a task force for the development of sustainable management strategies should be explored which would bind municipalities in the two counties of Somerset and Middlesex with the common goal of improving the management of the North Branch of the Raritan River, and in part, improving the water quality for a river that serves to provide potable water to residents in the region. Monitoring standards should be created for the seven municipalities, with outreach sessions to help property owners understand the importance of this conservation effort.

22. The existing ordinance has a buffer easement requirement of 50 feet along streams and rivers, which includes the requirement for a formal easement. Standards for maintenance of stream banks should be provided in the easement and Bridgewater should circulate the text to the members of the Regional Partnership in an effort to have them also adopt the easement requirements. In this way, meaningful progress can be made toward improving the Raritan Riverway as well as tributaries that lead to the river. Standards should include enforceable requirements such as:

- The stream banks should be cleared of fallen limbs and the stream bed should be cleared of limbs and trash.
- The understory vegetation 50 feet from the top of bank should not be removed. Understory growth should be required to remain for the benefit of the stream as well
- as for the animal life that will profit from the vegetation and shelter. Denuded riverbanks should be reforested, where permitted by the property owner, with understory vegetation allowed to grow.

23. The following general principles should be explored, for projects that disturb less than one acre of land:

a. Use water quality inlets and oil/grit chambers to remove oils and solids before the stormwater is discharged is environmentally responsible. The disadvantage of this is that the chambers must be periodically cleaned out.

b. An ordinance should be considered which requires that stormwater from one lot cannot be discharged onto property of another lot so as to create a nuisance.

c. Promote infiltration in areas where stormwater would otherwise be uncontrolled. This may be accomplished by grassed swales and drywells, which both detain water and allow for infiltration.

d. Encourage the construction of rain gardens for residential as well as nonresidential properties. Important features that show the benefit of a rain garden are both related to environmental considerations. Improved water quality and stormwater control enhance local water quality by allowing water

to be naturally filtered by the soil. In addition to its environmental value, rain gardens provide attractive landscaping and a natural habitat for birds and butterflies. Using native plant species are an excellent way to increase the appearance of native populations in an otherwise developed area.

Species that are very suitable for inclusion in a rain garden (as well as the design of a rain garden) is found in a publication entitled, "rain garden manual for New Jersey" as developed by The Native Plant Society of New Jersey, Office of Continuing Professional Education, Cook College (www.npsnj.org). Native plants of New Jersey and other suitable plants of that thrive in the rain garden are listed by common name:

- Blue Star
- Swamp Milkweed
- New England Aster
- Joe-pye-weed
- Cardinal Flower
- Canadian Anemone
- Common Milkweed
- White Turtlehead
- Wild Geranium
- Great Blue Lobelia
- Jack-in-the-pulpit
- White Wood Aster
- Sweet Flag
- Fringed Loostrife
- Blue Flag Iris
- Blue Marsh Flower
- Boneset
- Turk's Cap Lily
- Virginia Bluebells
- Red cardinal Flower

e. Encourage the use of Native Species that would show a likelihood of surviving. A map of the planting zones for New Jersey is an important consideration when selecting species to plant. When selecting species, those that are certified as suitable for Zone 6a should be selected. Also, the soil characteristics, exposure to wind and, in the case of wetlands and detention basin selection, the depth of water that the plant can tolerate are considerations that should be researched before embarking on a planting program. Bridgewater is classified as being in the Piedmont Section.

24. These species are noted as suitable for the Piedmont Section and would have a greater likelihood of thriving. As cautioned above, there are several parameters that should be considered before starting the planting program. The source of this information is the New Jersey Stormwater Best Management Practices Manual, Feb. 2004, Chapter 7 Landscaping.

The following list are Common New Jersey Species of Ridge and Valley, Highlands, and Piedmont Sections, Tree Species Understory.

- Hickory
- Chestnut oak
- Scarlet oak
- Scrub oak
- White oak
- Red oak
- Black oak
- Scrub pine
- Pitch pine
- Short leaf pine
- White pine
- Hemlocks
- Beech
- Black jack oak
- Sugar maple
- Sweet fern
- Flowering dogwood
- Black Haw
- Chinquapin
- Sassafras
- Redbud
- Mountain laurel
- Blueberry
- Fringe tree
- Pink azalea
- Maple-leaved arrowwood
- Spicebush

25. The Township should adopt an Ordinance to control and prohibit the planting, cultivating or growing of invasive plants, which includes barriers to prevent the spread of existing invasives into other areas of the Township. The Ordinance may include exemptions for existing invasive species and/or penalties for the new planting in violation of the Ordinance provisions.

PART 5

CIRCULATION PLAN

5.1 INTRODUCTION

Bridgewater Township has 239.75 miles of roadways of which 189.03 miles are maintained by the Township. Somerset County maintains 23.49 miles and 27.23 miles are maintained by the New Jersey Department of Transportation.

A Circulation Plan Element was previously prepared pursuant to N.J.S.A. 40:55D-28b and was adopted as an amendment to the Master Plan in 2010, Much of the factual information from the 2010 Plan remains valid. The Master Plan Amendment to the Circulation Element is considered to be part of this Master Plan and is available in the Planning Department.

Bridgewater Township has optimized its land use decisions for nonresidential uses by generally focusing these to the County and State roadway systems. The result of this decision is that the more intensely used facilities mostly lie on these roads, which are better equipped to handle volumes. The spin off challenge for the Township is to keep watch over roads which will be used as cut through routes between the state and county roads. In 2020, the Township implemented a 5-year roadway improvement plan with road repairs prioritized. It is suggested that there also be an effort toward maintaining the municipal roads that are used as cut-through roads in order to shorten travel. Examples of cut-through roads are Adamsville Road, Brown Road, Country Club Road, Milltown Road, Mountain Top Road and Vosseller Avenue. The Township could keep a running list of improvements that need to be made on these highly-traveled local cut-through roads.

Unlike in the past where 30-foot wide roadways were developed, even in the larger lot zones of R-50, Bridgewater has adopted the Residential Site Improvement Standard (RSIS) standards for cartway width which is dependent on the road classification. The Township still endorses the 50-foot right-of-way for most

subdivisions, with the reduction of the right of way width to 40 feet where noted in the RSIS. This 50-foot right-of-way width is not to signal that a wider cartway is required. It is to give sufficient room for cartway, trees, and sidewalks

5.2 CLASSIFICATION OF ROADS

The Federal, State and County Roads serve to handle heavy traffic. Local roads are a network that should not receive heavy traffic volumes, particularly truck traffic. The functional Classification of Roads (as noted in the Amendment to the Circulation Element of the Master Plan by the RBA, dated 2010 is provided below. Also shown is a Street Map that provides detailed roadway classification information.

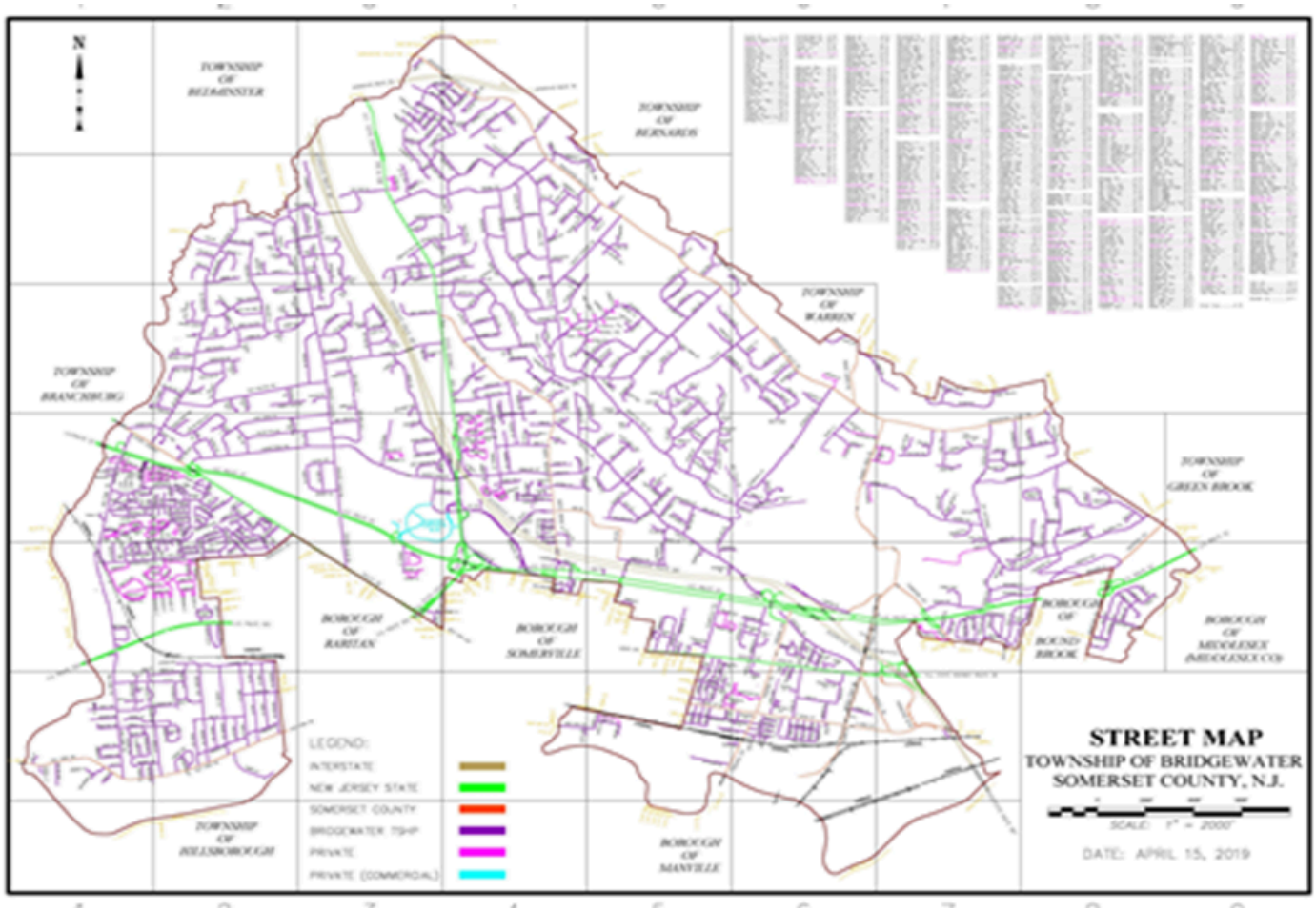


Table 1 – Functional Classification of Roads in Bridgewater

	Roadway	Average Annual Daily Traffic (vehicles/day)	Length in Township (miles)	Vehicle-Miles Travelled		Lanes	Jurisdiction
				Daily	Annual (Millions)		
Freeways	Interstate 78	103,600	0.89	92,200	33.7	4-8	State
	Interstate 287	77,300	8.48	655,500	239.3	4-10	State
	Sub-Total		9.37	747,700	272.9		
Principal Arterials	Route 22	39,800-87,700	8.24	516,100	188.4	4-8	State
	Route 202 / 206	39,300-69,300	8.63	400,000	146.0	2-6	State
	Sub-Total		16.9	916,100	334.4		
Minor Arterials	Easton Tpke (Route 28)	10,800-20,200	2.51	47,800	17.4	2	State
	Union Av (Route 28)	15,000-23,400	2.18	37,000	13.5	2	State
	East Main St (CR 533 / 612)	13,400	1.34	17,900	6.5	4	County
	Easton Tpke (CR 614)	9,800	0.67	6,600	2.4	2-4	County
	Finderne Av (CR 533 / 633)	18,500	1.54	28,500	10.4	2-4	County
	Foothill Rd north of Bridge Street (CR 639)	5,000	1.38	6,900	2.5	2	County
	Foothill Rd south of Chimney Rock Road (CR 683)	6,900	0.52	3,600	1.3	2	County
	Mountain Av (CR 527)	12,300	1.41	17,300	6.3	2	County
	North Bridge St (CR 639)	15,400	1.23	18,900	6.9	2	County
	Old York Rd (CR 567)	5,700	2.21	12,600	4.6	2	County
	Thompson Av (CR 525)	8,600	0.69	5,900	2.2	2	County
	Washington Valley Road (CR 525 / 616 / 620)	5,100-14,800	6.38	38,500	14.1	2	County
	Country Club Rd	5,000-9,400	3.2	19,800	7.2	2	Township
	Foothill Rd, Chimney Rock Road to Finderne Avenue	2,000	0.75	11,200	4.1	2	Township
	Foothill Rd, Finderne Avenue to Ronson Road	14,900	0.42	6,300	2.3	2	Township
	Foothill Rd, Ronson Road to North Bridge Street	7,300	2.26	16,500	6.0	2	Township
	Woodlawn Av / Garretson Rd	7,000	2.95	20,700	7.6	2	Township
	Sub-Total		31.64	316,000	115.3		
Commercial Collector Roads	Chimney Rock Rd (CR 675), south of Thompson Av	3,700-6,600	0.93	4,800	1.8	2	County
	Promenade Blvd (CR 685)	7,300	0.66	4,800	1.8	4	County
	Prince Rodgers Avenue	4,600	0.45	2,100	0.8	2	Township
	Commons Way	16,500	1.30	21,500	7.8	4	Township
	Sub-Total		3.34	33,200	12.1		
Residential Collector Roads	Chimney Rock Rd (CR 525), north of Thompson Av	4,750	1.69	8,000	2.9	2	County
	Vogt Drive (CR 673)	1,400-1,700	0.95	1,400	0.5	2	County
	Adamsville Road	2,600	0.95	2,500	0.9	2	Township
	Brown Rd	3,200	1.36	4,400	1.6	2	Township
	Crim Rd	not available	1.90	7,600	2.8	2	Township
	Meadow Rd	not available	2.28	9,120	3.3	2	Township
	Milltown Rd	5,700-8,400	3.13	21,900	8.0	2	Township
	Mine Rd	not available	1.65	6,600	2.4	2	Township
	Mountain Top Rd / Papen Rd	not available	3.66	14,640	5.3	2	Township
	Steel Gap Rd / Newmans Ln	not available	1.86	7,440	2.7	2	Township
	Talamini Rd	5,100	0.96	4,900	1.8	2	Township
	Van Holten Rd	not available	1.20	4,800	1.8	2	Township
	Vanderveer Rd	not available	1.60	6,400	2.3	2	Township
	Vosseller Av	3,700-4,900	1.99	7,600	2.8	2	Township
	Waltersbrook Dr	not available	1.23	4,920	1.8	2	Township
	Sub-Total		26.41	112,220	41.0		
Local Roads	Various	not available	199.5	149,618	54.6	2	
	Total		287.12	2,274,838	830.3		

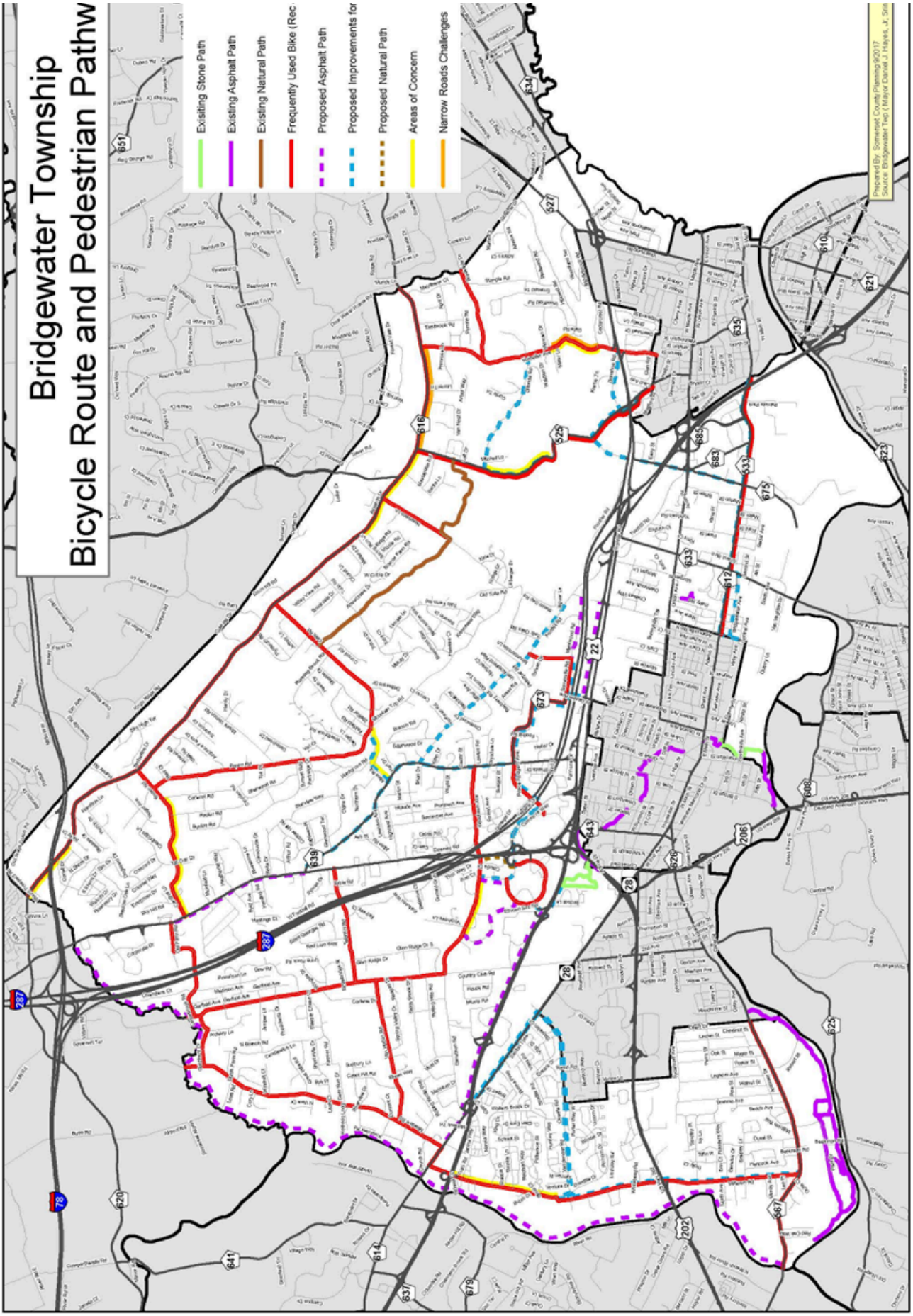
Note: Any street not shown by name is a local road. The traffic volumes shown herein were obtained from various peak period traffic counts obtained between 2005-2010, with adjustment factors for daily traffic. They are not intended to

5.3 BICYCLE AND PEDESTRIAN PLAN

The development pattern established throughout the Township has prompted awareness for the desire of a biking/hiking trail network. Biking is best to be designed to connect bicycle and hiking in between nodes of interest, be it to a retail setting or to a natural setting. In this way, the trail can be multi-purpose and serve a greater number of residents. Safety is a matter which should be addressed when designing bike/hike trails.

Bike and hike trails are important components in greenway planning as well as municipal-wide recreational strategies. In fact, the NJDOT in July 2000 adopted the following policy: "Bicycling and walking are viable and important travel modes and offer untapped potential for meeting transportation needs and providing recreational health benefits. Provisions for bicycling and walking are important and necessary elements of comprehensive solutions to transportation problems and needs. Opportunities should be actively sought to address transportation needs and deficiencies through the provision of bicycle and pedestrian accommodations. These modes can also supplement transit use and replace motor vehicle trips by serving short trips."

A Township ad hoc committee of bicyclists has studied and mapped the existing biking routes commonly used by bikers. This committee offered their perspective on the difficulty of the existing bike routes (grade) and physical challenges that are contained in the geometry of the existing roads that are used for biking. The map provided below is not an engineering analysis of good routes; it is simply an analysis of existing roads from bikers who routinely bike the paths and roads of the Township. Criteria for the development of sound and safe biking trails are offered below and should be addressed for the development of formal bike trails.


Bridgewater Township
Bicycle Route and Pedestrian Pathw
Exisiting Stone Path
Existing Asphalt Path
Existing Natural Path
Frequently Used Bike (Rec
Proposed Asphalt Path
Proposed Improvements for
Proposed Natural Path
Areas of Concern
Narrow Roads Challenges
Prepared By: Somerset County Planning 9/2017
Source: Bridgewater Twp. (Mayor Daniel J. Hayes, Jr. Sre

5.3.A SIDEWALKS

Sidewalks are an asset for family and corporate life. It binds families and gives the opportunity for brisk exercise during work lunch hours. Gaps in sidewalks have been identified in the Circulation Element of the Master Plan 2010. To have a truly walkable community which encourages an active lifestyle and connectivity, gaps in local sidewalks must be addressed, especially in areas in proximity to schools and houses of worship. Due to the desire for walkable communities, the Township should encourage the County to install sidewalks in the existing sidewalk gaps on County roads, particularly since property owners may not be able to do so. The listing of sidewalk gaps is shown for the following priority roadways. It should be noted that many of the gaps are located on County roads, many of which are in the Regional Center. In the evaluation of sidewalks, crossroad marking and handicap detectors at intersections should be included as part of the sidewalk gap study. The gap listing noted below is not exclusive. The map on the following page from the 2010 Circulation Element of the Master Plan provides the location of sidewalks, except where they have been expanded by recent projects. Where there are no red/indicated sidewalks, this indicates where gaps are located, including the following places:

- Washington Valley Road, Martinsville (County Road)
- Foothill Road (County Road, partial)
- Bridgewater Promenade (County Road 685)
- East Main Street (County Road 533)
- Finderne Avenue (County Road 533)
- North Bridge Street (County Road 685)
- Garretson Road (Municipal Road)
- Woodlawn Avenue (Municipal Road)
- Commons Way (Municipal Road)
- Milltown Road (Municipal Road)
- Old York Road (County Road 567)
- Easton Turnpike (County Road 614)

As noted, the Township has a sidewalk fund that is an appropriate source to fund a portion of the sidewalk design and construction for the gaps on municipal roads. A sidewalk construction initiative should be developed to address new sidewalks, with an emphasis in places where with existing curbing along the road.

5.3.B BICYCLE AND PEDESTRIAN CRASH DATA

The following are reported clusters of bicycle/pedestrian crashes identified in the Amendment to the Circulation Element, prepared by RBA group in 2010. Note that many are on County roads.

- Route 28 (Easton Turnpike) from Pearl Street to I-287 SB ramps (County Road)

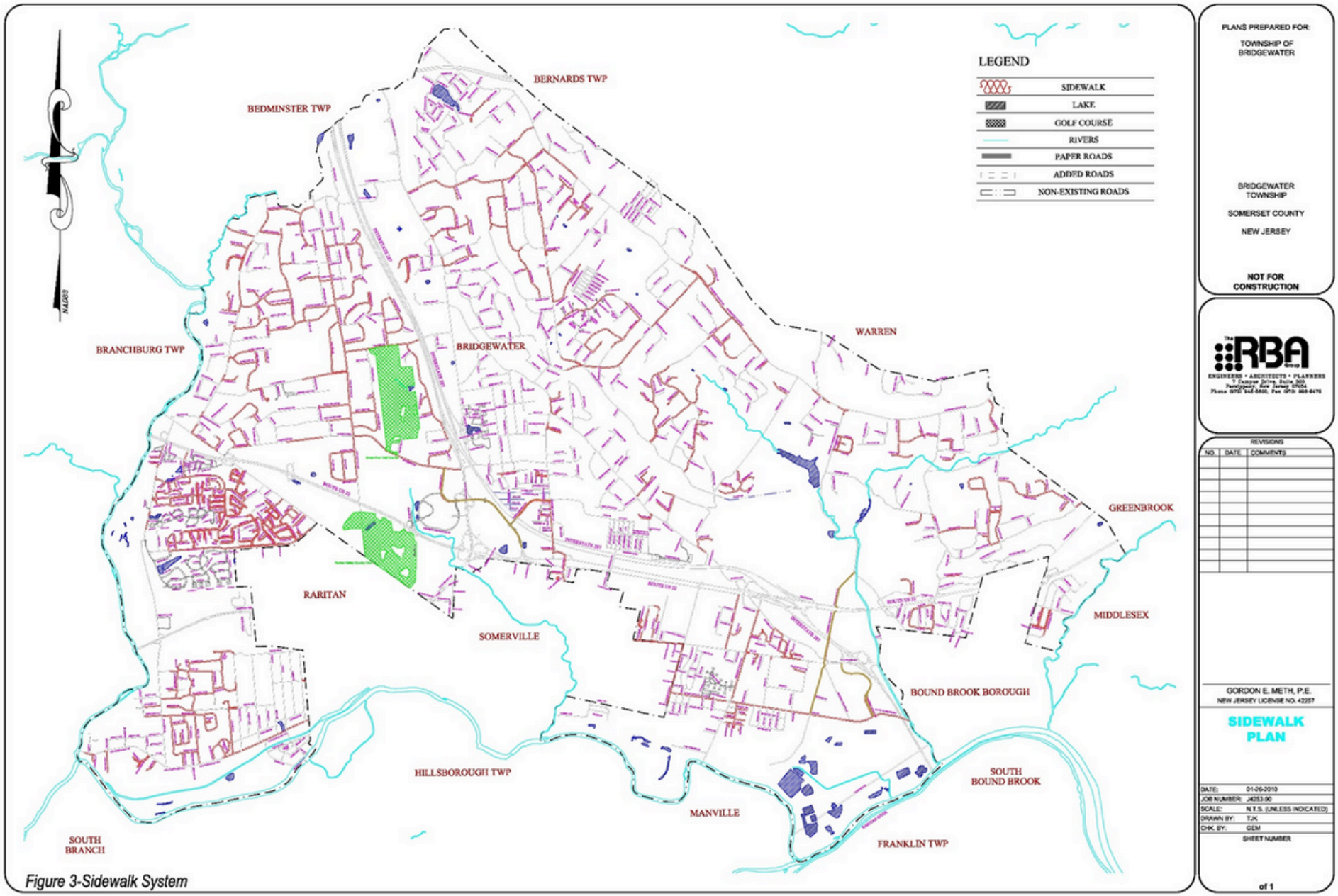


Figure 3-Sidewalk System

- Promenade Boulevard (County Road)
- Commons Way (Municipal Road)
- East Main Street (County Road)
- Finderne Avenue (County Road)

5.4 DESIGN CRITERIA FOR SAFE BIKING TRAILS

1. Development of safe biking trails is a critical feature in attracting families to biking routes. Biking trail guidelines have been issued by the National Parks and Recreation Association and the following design recommendations are offered:

   a. Location. There are two basic types of bicycle trails: (1) those within park areas, and (2) those used as access to parks, for commuting and touring. When determining the location of trails, consideration should be given to utilizing abandoned canal towpaths, abandoned railroads, and low-volume roads. When it is necessary, parallel bikeways to roads can be considered. Close coordination of planning efforts with transportation officials in the various jurisdictions traversed by the trail is necessary.

   b. Length. The average cyclist can easily sustain speeds of 10 mph on level terrain. Trails should be designed with varying lengths and preferably with a loop system. Three to five miles would be a minimum length with trails of 10 to 30 miles desirable. Touring trails can be much longer and can tie into youth hostels and campgrounds for overnight stopovers.

   c. Gradient. Bicycle trails should follow the contour wherever possible. Bicycle gradients should not exceed eight percent and pitches from four to eight percent should occur for short intervals only. When long grades are unavoidable, provide frequent, wide, level areas where the less-than-average cyclist can dismount without difficulty and rest.

   d. Width of Trails. Care must be taken when laying out trails to avoid sharp angles and short radius corves, particularly in an area where higher speeds might be attained. A bicycle going quite slowly can be turned in a twelve-food space (a six-foot radius). The recommended minimum turning radius is 10 feet, except in areas where high bicycle speed is expected. Turns should be banked where possible.

   e. Drainage. The paved bicycle trail is very similar to a road in construction and the same general conditions and solutions for drainage would apply as for road construction; the better the drainage the longer-lasting the bikeway.

   f. Surfacing. The design sections of the bicycle trail are generally the same as sidewalk design sections. The recommended surfacing material is bituminous paving; other acceptable choices are concrete, soil cement and compacted gravel. A widely used trail section is 4 inches or more of crushed stone checked and rolled with fines (quarry dust).

g. Utilize standard bikeway markers and signs along bike lanes.

h. Bicycle Concessions. Park trails with heavy use by non-local people should probably include bicycle concession facilities. These can be developed in conjunction with other concession facilities (boat rental, food services) for more economical operation.

2. Post an announcement on the municipal website the locations where bike and pedestrian paths are available. Promote the construction of multipurpose paths where there is sufficient land available for a minimum of 6' wide pathways.

5.4 CIRCULATION PLAN RECOMMENDATIONS

1. The Township should continue to study and adopt regulations that are legally-permissible to direct truck traffic to the most appropriate roadways. Protection of residential neighborhoods from cross-through commercial traffic is one element that can support the quiet neighborhoods of the Township.

2. In order to support future Ordinance amendments, the Township should consider updating the functional classification of roads in Bridgewater to include traffic counts.

3. As noted in the 2005 Master Plan, 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 Police Coordinator.

4. Section 126-190, Lighting, should add a new subsection, 126-190(M) to state, "All street and parking lot lighting should have LED lamps with a lamp-housing design compatible with existing lights in the immediate area."

5. Bike trails are recommended to be constructed along Milltown and Vanderveer Road in order to have connections to the nearby commercial and residential areas.

6. The Township Sidewalk fund should be used to fill in sidewalk 'gaps', particularly near schools and where meaningful pedestrian linkages for trails would be accomplished.

7. There are areas of the Township that have a number of paper streets that will never be improved. If it is certain that the roads will not be extended, discussion should be conducted to either vacate the paper street or, if the streets are very long, plans for hiking trail connections should be explored for future trail construction.

8. The parking lot at the southwesterly side of the intersection of Route 22 and Milltown Road was previously and briefly utilized as a "park-and-ride" bus stop. The viability of this site for public transportation or similar circulation uses should be analyzed.

9. The Township should consult with experts to determine whether or not truck routes can be focused to use only state roads, county roads, commercial collectors and minor arterials. The purpose is to preserve the tranquility of residential streets from noise, truck traffic, oil droppings which could negatively affect the local streams and watercourses.

10. In keeping with its lower-density suburban character, Bridgewater should continue to work with its neighboring municipalities to create an integrated system for biking and hiking opportunities.

11. At this time, the ordinance exempts the required installation of sidewalks on roads classified as major arterials, which include state highways. Sidewalks along Route 28 and along Route 202/206 North should be studied as these areas have a mixture of non-residential and residential uses that could benefit from being more walkable, as long as safety is considered in the feasibility study. The Township has a sidewalk fund that would be an appropriate source of funding to underwrite a portion of the design and construction on local roads.

12. The Township should encourage the County to study and then provide roadway improvements to these roads where bicycle/pedestrian crashes have occurred. Since these locations lie in the Regional Center, this encouragement can be accomplished through discussions on that level.

13. The advantages and challenges for electric bikes (E-Bikes) should be translated into a design policy for their use.

14. Bike and pedestrian connections should be made with Somerville. Connections should also be designed to connect Martinsville with Finderne, which address both connectivity and safety.

15. Provide signage, dedicated bicycle lanes and jogging paths along appropriate roadways.

16. Multipurpose trails within parks should be a minimum of six feet in width to allow for greater versatility of the user.

17. A master planning effort for Township-owned and impressive land of Camp Cromwell has been initiated, which included 6' wide multi-use hike and bike trail that was designed in consideration of the guidelines published by the National Parks and Recreation Association. The Township is encouraged to seek Federal funding for the design and implementation of any additional trails or improvements. Possible sources are the Transportation Enhancement Act for the 21st Century which provides funding for transportation improvement that can include trails, pedestrian, and bicycle routes.

18. Create new open space opportunities and improved connection between recreation facilities within the higher density neighborhoods of Bradley Gardens and Finderne.

19. The Township should explore the feasibility to develop active recreational uses as part of the Middle Brook Open Space system that would include new trail installation improvements.

20. Linkage trails should be considered to expand the benefits of open space:

- Linkage Trails along corridors that can eventually be developed as local connections between neighborhoods
- Hiking trail connecting Adamsville Elementary School with Sunny Slope.
- Linkage Hiking trail accessing Torpey Athletic Complex from Finderne.
- Linkage Trail following an existing footpath from E. Main Street near Route 287 underpass to Bridgewater Promenade should be considered.
- Linkage Hiking trail connecting Garretson Road/Woodlawn Avenue to Prince Rodgers Avenue east of Route 287.
- Linkage Trail to connect Bridgewater-Raritan Middle School (Foothill Rd) to North Bridge Street crossing behind Vocational Technical High Scholl, parallel with the Route 287 corridor.
- The Middlebrook Trail is a Bridgewater asset that is popular with hikers and bird watchers Each year, it gives hundreds of people the pleasure of walking along a historic trail through a historic forest. Members of The Boy Scouts of America have performed several stewardship services on the Middlebrook Trail. Potential linkage trails should be explored.

21. Parking lot design should include a courtesy landing strip along the side of island curbing and curbing where there is landscaping treatment (such as curbing near a building entrance). This will better facilitate the safe exit from a vehicle. This design is an accommodation for the space that is lost between parked vehicles.

Below are two images of the courtesy strip that is referenced which depicts the space provided. This additional space allows the driver to step onto parking lot pavement rather than stepping onto the island curb in order to exit the vehicle.

22. A new subsection should be added to 126-171, Parking Area Design Standards. The new subsection should read, “126-171 (G). For all site plans, a courtesy landing strip of at least twenty-two inches (22”) wide shall be provided where the side of a parking stall abuts a curbed island or a curbed landscaped area. The courtesy strip shall have hatched-striping so as to clearly indicate that the striped area is not to be used for parking.”

PART 6

COMMUNITY FACILITIES PLAN

6.1 INTRODUCTION TO THE COMMUNITY FACILITIES PLAN

The Community Facilities Plan documents the public and quasi-public services that aid the community which, for Bridgewater, highlights the exceptional support network that Bridgewater offers its residents. The First Aid Squad and Fire Departments are volunteer organizations that dedicate themselves to the safety of life and possessions of Bridgewater Township. The amount of time devoted to training is remarkable and the Master Plan applauds the efforts of these selfless people.

6.2 EMERGENCY SERVICES

A. FIRST AID SQUADS

There are four volunteer rescue squads which provide EMS coverage to residents as well as perform specialized tasks, such as vehicle extrication, water rescue and other emergency services. These squads are as follows:

- Bradley Gardens Rescue Squad
- Finderene Rescue Squad
- Green Knoll Rescue Squad
- Martinsville Rescue Squad

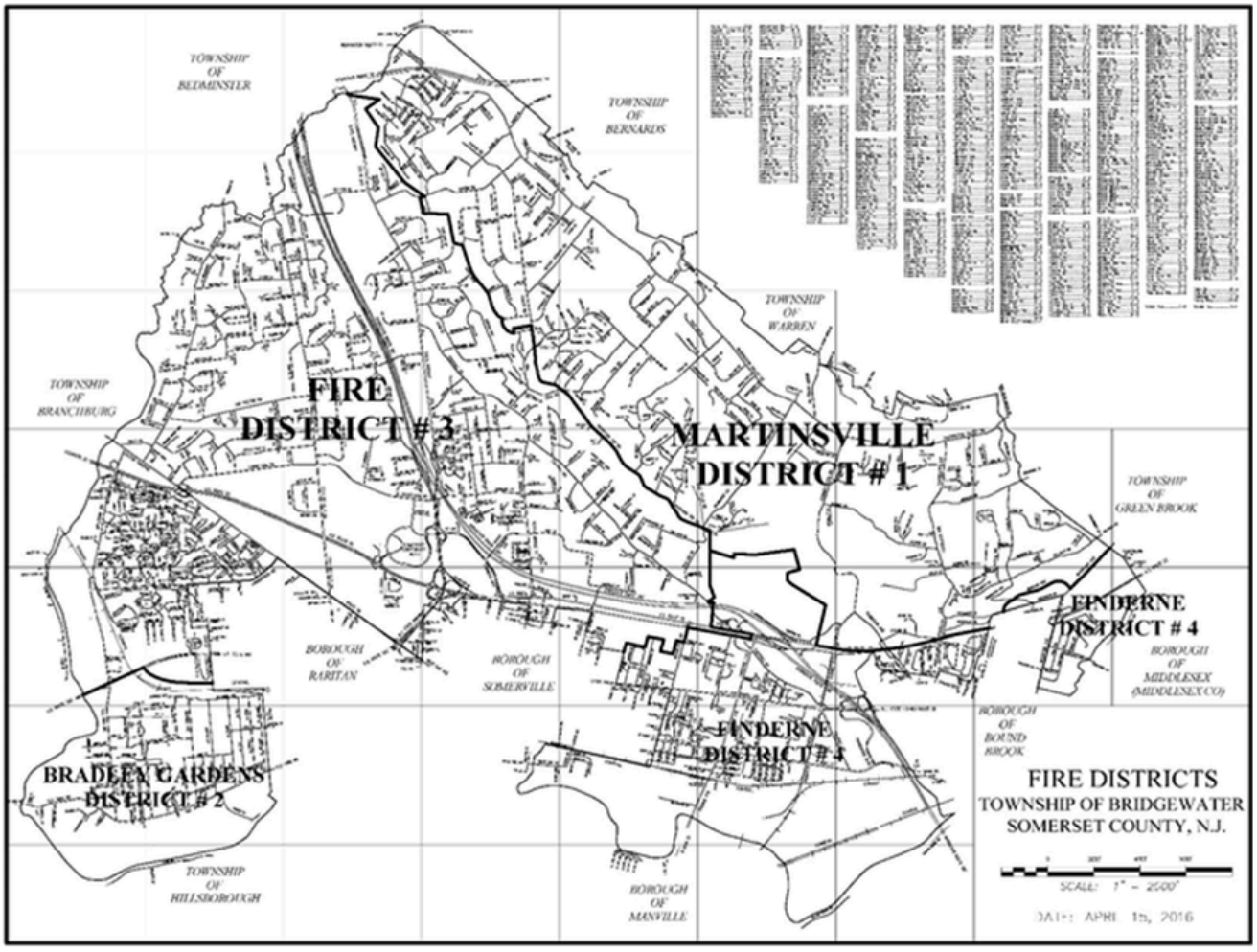
In the event that paramedic services are required, ALS staff are dispatched from Robert Wood Johnson University Hospital – Somerset. Robert Wood Johnson University – Somerset covers Basic Life Support calls for a portion of the Township during daytime hours. MEDEVAC support can be brought in from any of a number of helicopter companies.

B. FIRE DEPARTMENTS

There are six all-volunteer fire companies that serve the Township. These fire

companies provide fire suppression and assist in vehicle extrications and rescue operations as well. These companies are as follows:

- Country Hills Fire Company which is in District 3
- Green Knoll Fire Company which is in District 3
- North Branch Fire Company which is in District 3
- Bradley Gardens Fire Company which is in District 2
- Finderne Fire Company which is in District 4
- Martinsville Fire Company which is in District 1



C. POLICE DEPARTMENT

Bridgewater currently has 80 officers who are part of its Police Department. The officers include a Chief, a Captain of Operations and a Captain of Administration. There is a patrol division, a detective bureau, a traffic unit, a communications bureau, a youth services bureau, Community Policing Program (CPA), Support Services, Public Information Officer and other divisions. Headquarters are located in the Municipal Complex at 100 Commons Way. The 9-1-1 Emergency calls are handled off-site by the County.

6.3 PUBLIC LIBRARY

The Bridgewater branch of library is located at 1 Vogt Drive at its intersection with North Bridge Street. The property is owned by Bridgewater Township and shares a small portion of the tract with a cellular communication company. The formal reference to the library is the 'Somerset County Library System of New Jersey Bridgewater Branch.' According to N.J.S.A. 40:54-29.4, governing bodies of each municipality shall "...provide for the apportionment of annual and special appropriations therefore among such municipalities...such apportionment of appropriations may be based on the assessed valuation of the respective municipalities, their populations, or such factors as the governing bodies shall agree. Such agreement shall provide that the combined minimum appropriation for the joint library shall annually not be less than one-third of a mill on every dollar of assessable property with the participating municipalities based upon the equalized valuation of such property as certified by the Director of the Division of Taxation in the Department of the Treasury." Bridgewater has partnered with Somerset County and complies with the terms of the regulation. The hours of operation for the library can be found on their website or individuals can call the desk at 908.458.8415. Projects that are being investigated include improvements to the HVAC system and parking lot.

6.4 SCHOOLS

Bridgewater is well-regarded in the State for its educational system. The schools are noted below with enrollment and Student/Teacher ratios. There are 13 schools in Bridgewater that are shown below, inclusive of County and regional school facilities. Four are high schools; one is 7-8; two schools are for grades 5-6.

Name of School	Grades
Adamsville Primary School	Pre-K, Kindergarten thru 4th
Bradley Gardens Primary School	Pre-K, Kindergarten thru 4th
Bridgewater Raritan High School	9th thru 12th
Bridgewater Raritan Middle School	7th and 8th
Crim Primary School	Pre-K, Kindergarten thru 4th
Eisenhower Intermediate School	5th and 6th
Hillside Intermediate School	5th and 6th
Milltown Primary School	Pre-K, Kindergarten thru 4th
Somerset County Vocational Technical High School	9th thru 12th
Somerset Elementary Academy	Kindergarten thru 8th
Somerset Secondary Academy	9th thru 12th
The Career Center of SCESC	9th thru 12th
Van Holten Primary School	Kindergarten thru 4th

6.5 SENIOR CITIZEN CENTER

The Senior Citizen Center is a one-story building located at 455 Somerville Road, to the north of Route 22 and to the east of the Vo-Tech High School. The Senior Affairs Coordinator is responsible for the daily operation of the Senior Recreational Programs and reports to the Director of Human Services, whose offices are in the municipal complex. The Senior Affairs Coordinator implements the policies and procedures established for the Senior Center. The staff consists of a Senior Affairs Coordinator, one licensed bus driver, and one Senior Center assistant. Going into 2020, it is shown that the activities at the Senior Center are wide-reaching. They include computer classes, card games, billiards, knitting, jewelry making, cooking, self-defense, weight training, aerobics, tai chi, country western line dance, yoga, chair yoga, tap dance, and exercise classes designed for people with arthritis such as sit and get fit and sit and energize.

Trips are arranged for seniors to attend local plays, dine at local restaurants, visit local flea markets, doctors, grocery stores, and malls. Particular assistance to the elderly is given in the form of setting up shopping at local super markets and medical appointments for Centerbridge seniors. The Senior Center staff also coordinates the Senior Roxies dance routines and bookings for entertainment at

local nursing homes, veterans' hospitals, and any other invites to perform. Senior Health Education programming for seniors on various health topics is an important program offered at the Senior Center.

Consideration should be made to utilize the land abutting the Senior Center for a Senior Garden for flowers and vegetables. If this is not feasible, there should be consideration for a Community Garden. The advantage of the location at the Senior Center is that there is senior activity throughout much of the day. The location is not isolated, but it is sufficiently remote that there would be fewer incidents of unwanted visitors. It is also anticipated that there would be sufficient senior interest in having a garden. The soil should be tested for suitability for gardening. Although there are wetlands in the area, it is believed that the wetlands are not so widespread that a garden would not be feasible. The issue of Green Acres may cause impediments to an exclusive Senior Garden. It may be necessary to have a Community Garden instead. In this case, it is anticipated that the primary membership would be seniors, anyway.

A few of the many senior activities are summarized below which shows the dynamic operation and success of a vital senior program.

The following programs were held by the Senior Center staff:

- Spring Health Fair with over 42 health advocates and over 250 attendees.
- Mind Body Senior Wellness Fair with 14 holistic health education and service stations and 85 attendees.
- Fourteen fitness and recreational programs on a weekly basis with 100 seniors participating weekly.
- Three cultural cooking classes for 30 seniors, introduced Italian, Chinese and Indian cooking.
- One assisted living and rehabilitation center program where seniors were educated on options available to them as they age with 100 seniors in attendance.
- One senior financial planning and estate law seminar in partnership with Edward Jones Financial Services with 50 seniors in attendance.
- One bank fraud seminar in partnership with Fulton Bank educating seniors on not becoming victims of financial fraud with 50 seniors in attendance.

- One bank fraud seminar in partnership with Fulton Bank educating seniors on not becoming victims of financial fraud with 50 seniors in attendance.
- One financial services seminar in partnership with Investors Savings Bank educating seniors on the different investments available with 100 seniors in attendance.
- One visit from nutritionist and 1 visit from dermatologist.
- One program from the State Department of Senior Services regarding Senior Medicare Fraud.
- One Heart Health Program in partnership with Raritan Valley Community College with 25 seniors in attendance.
- The Knitting Club knitted and donated over 200 articles of clothing and blankets to children's hospitals across New Jersey.

6.6 MUNICIPAL ADMINISTRATIVE SERVICES

The municipal services are housed at the municipal complex, located at 100 Commons Way. This complex includes the Court, Police and Administration, which provides for increased efficiency and improved communication between all departments. The Municipal Complex was designed and constructed in the early 2000s and the building is viewed as adequate at this time; no expansion plans are needed. The building is efficiently designed with 'soft wall' options that offer flexibility in conference room size. Overflow seating, with audio and video feeds, are offed in a large conference room located off the Courtroom. This feature is used when the Courtroom reaches capacity of occupants and offers interested individuals full access to the activities occurring in the Courtroom. Services which are provided at the complex are listed in the following subsections.

6.6.A TOWNSHIP ADMINISTRATOR

The Township Administrator works closely with the Mayor in handling the governmental affairs of the Township. The Administrator manages each one of the municipal Departments and addresses in detail the questions that are raised by the Township constituents. Employee, Labor and Legal matters are managed by the Administrator, in conjunction with the Mayor. The Administrator arranges scheduling for the Township Council and attends all meetings of the Council, giving up to date municipal reports at each meeting. The Administrator holds many licenses and certifications and oversees all departments as well. In many instances, this enhances the ability to carry out responsibilities. The Administrator has an office manager that handles the office duties.

6.6.B DEPUTY TOWNSHIP ADMINISTRATOR

Due to the large volume of duties associated with the Administration of government, a Deputy Administrator takes on duties of the Administrator as well and operates as

Administrator in the absence of the Administrator.

6.6.C OFFICE OF CONSTITUENT RELATIONS

In an effort to be quickly responsive to the concerns of the Bridgewater residents, the Office of Constituent Relations has been established. This is a full-time task where concerns are received and resolutions are found. This department has three staff members devoted exclusively to helping the residents. This department reports to the Deputy Administrator.

6.6.D TOWNSHIP CLERK

The office of the municipal clerk is part of the legislative branch (governing body) of Bridgewater Township's government and has four full-time employees: clerk, deputy clerk and two confidential secretaries. This office is responsible for maintaining official custodial records including the municipal seal; maintaining custody of all minutes, books, deeds, bonds, contracts and archival records of the municipal corporation; attesting to the signatures of municipal officers and officials; and maintaining receipt of service of legal documents and similar duties.

This office is responsible for preparing meeting agendas at the discretion of the Governing Body and being present at all meetings of the Governing Body; keeping an official record of the proceedings of every meeting; retaining the original copies of all minutes, ordinances and resolutions; processing, recording, filing and advertising ordinances, resolutions, official notices and the municipal budget; administering, recording and filing oaths of office; maintaining custody of all official records not specifically handled by other departments; and acting as liaison to the public and correspondent on behalf of the Governing Body.

Chief Administrative Officer of All Elections: This office is responsible for certifying vacancies of elected offices; maintaining receipt of nominating petitions and certifying to the County Clerk of local candidates nominated by petition; determining validity of petitions; conducting the drawing for positions of candidates on the local ballot; furnishing materials for local elections; suggesting polling places; maintaining receipt of election results; and certifying to the County Clerk persons elected county committee offices in each election district.

Administrative Officer: This office is responsible for accepting applications for licenses and permits and the issuance of licenses and permits, except where statute or municipal ordinance has delegated that responsibility to another government office; issuing assessment search certificates; conduct business with other municipal departments as directed by the Governing Body; serving as an information officer to the public and to the media; certifying to Bond Counsel as to the proper advertising, filing of the Supplemental Debt Statement. As the Records

6.6.E CODE ENFORCEMENT

The Code Enforcement office is located on the first floor of the Administrative portion of the municipal complex. The Construction Official oversees the operations and reports to the Township's Director of Municipal Services along with the State of New Jersey. This Division processes building permit applications for all residents and/or contractors doing work in Bridgewater. The process includes plan review, building inspections as construction progresses and concluding with the issuance of the Certificate of Approval or Occupancy. This process is involved and needs to be so in order to Administrative adequately protect the health, safety and welfare of the occupants or users of buildings and structures.

The Code Department has the following staff which handles building permit applications. The number of individuals who are in a certain capacity may change as conditions warrant: a construction official, technical assistant, building subcode official, building inspector, electrical subcode official, electric inspector, plumbing subcode official, plumbing inspector, fire subcode official, fire inspector and elevator subcode official.

In addition to the extensive plan review needed prior to the issuance of building permits and again prior to the issuance of Certificates of Approval and Occupancy, the Code Division is also responsible for record keeping, which includes the following:

- Issue construction permits.
- Determination of the proper fee for the construction work required.
- Collecting fees and penalties and keeping of records to ensure funds are properly accounted for.
- Collecting affordable housing fees at the time of issuance of building permit and at the time a CO is issued.
- Record all notices of violation upon receiving notification and determine all penalties for non-compliance with the penalty notices.
- Ensure that all required inspections are scheduled and performed timely and within state parameters.
- Record stop work orders upon notification from the appropriate Subcode
- Prepare and obtain reports required in the regulations.
- Attend meetings and hearings as required by the regulations.
- Audit department costs to comply with State requirements to be fee sufficient.

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- Record stop work orders upon notification from the appropriate Subcode
- Prepare and obtain reports required in the regulations.
- Attend meetings and hearings as required by the regulations.
- Audit department costs to comply with State requirements to be fee sufficient.

6.6.F COURT

The Municipal Court has jurisdiction over traffic offenses, disorderly person's offenses, petty disorderly person's offenses, weights and measures, fish and game laws, penalty enforcement actions, boating laws, and municipal ordinance violations which occur within the boundaries of Bridgewater Township, as well as the Borough of Somerville and Borough of Raritan. Court personnel provide guidance to the individuals calling and appearing at the municipal court, perform duties of the courts, maintain public confidence within the courts and act as a liaison between the public and Judiciary as a whole. Bridgewater, Somerville, and Raritan Borough Municipal Courts resolve disputes in a peaceful, fair and just manner.

The office consists of a Presiding Municipal Court Judge, Court Administrator, Deputy Court Administrator and four violations clerks. The Bridgewater Township, Borough of Somerville, and Borough of Raritan Municipal Courts adjudicate all cases within its subject matter and territorial jurisdiction, imposes and collects fines, and imposes non-monetary penalties (Probation and Community Service).

Duties of the court are to:

- Process and input incoming summonses and complaints for Bridgewater, Somerville, Raritan Borough, from New Jersey State Police, Fish & Game, Weights & Measures, Animal Control and Local Enforcement Officials; Receive and respond to oral, telephone and written inquiries from all parties concerning both active and closed cases.

- Schedule all court sessions. Court employees must interact with local and state police officers, defense attorneys and defendants to coordinate our court sessions.

- Collect ticket revenue from defendants at the window, through the mail, over the internet, and during court sessions. Oversee ticket control and supplies for both

- Bridgewater, Somerville, and Raritan Borough officers.

- Prepare, process, and distribute all Public Defender cases.

- Arrange and complete necessary paperwork after Videoconferencing prisoners from the Somerset County Jail and other various jails throughout the state. Complete and disburse mandatory sentences at the end of each court session – Community Service, Jail, Probation, etc.

- Bail entry for persons who have outstanding warrants for their arrest. Issue weekly and monthly warrants for non-appearance and non-compliance.

- Prepare for court sessions, creating calendars and supplying them to the local police, judges, prosecutors, and public defender.

- Schedule interpreters for defendants or witnesses with special language needs.

- Maintain a system of records that is in compliance with the Administrative Office of the Courts (AOC) Guidelines.

6.6.G ENGINEERING

The Engineering Division is staffed by full-time and contract individuals. There are 2 staff Engineers, an Engineering Technologist and a Department Secretary. The Township Engineer is contracted on an annual basis. In addition to reviewing applications before the Planning Board and Zoning Board of Adjustment, the Engineering Division is responsible for roadway and traffic design and inspections as well as granting tree removal permits, site plan waivers and dealing with the resolution of drainage and other Administration and concerns. The Engineering Division is reportable to the Director of Municipal Services.

6.6.H FINANCE

The Division of Finance is responsible for all of the Township of Bridgewater's budgetary and financial functions. It is the responsibility of the CFO to monitor internal controls and ensure compliance with the rules and regulations established by the State of New Jersey. The CFO reports directly to the Township Administrator. Currently, the Township Administrator acts as the Director of Finance. This office is part of the Township Administration and consists of six employees: CFO, Deputy CFO/QPA, Deputy CFO/Treasurer, Assistant Treasure, Financial Operations Coordinator, and Finance Assistant.

This office is responsible for preparing the annual budget. These duties include distribution of budget guidelines to all departments, collection of budget requests from the department and assembling them into the budget document, participation during budget hearing, and preparation of the introduced budget. The budget is prepared in compliance with the State guidelines. This function also includes monthly review of the budget with various departments and monitoring of the Township's expenditures. This function includes management of available cash on hand to maximize interest earnings. The division of Finance collets funds from various departments and ensures timely deposits to the bank. Monthly cash reconciliations are performed to ensure accountability of all funds within the Township.

The Division manages the Township's capital projects. They ensure that cash is available to make payments to the vendors upon completion of the projects and funds for the projects are borrowed in a timely manner. Debt payments are part of the annual budget and analysis of the Township's total debt is made in order to authorize additional capital projects.

This office is responsible for payments of all invoices for operating and capital needs of the Township as well as management of financial aspects of escrow accounting: monitoring of escrow balances and payments to professionals, communication with maintenance of performance escrow, reporting and other escrow functions.

Financial aspects are administered through this department: management of various accounts, payments of all bills, and communication with various vendors. The Department is responsible for all work and/or coordination with other Township officials necessary for the preparation of grant applications for funding from the federal, state and county governments, and administering grant funded projects. Administration duties vary from project to project and range from periodic grant reporting to grantor agencies, either on a monthly, quarterly, or annual basis, to full implementation of a project.

6.6.I HUMAN RESOURCES

This office ensures that all employees are compensated in accordance with contracts and salary guidelines and is responsible to see that all legal requirements are satisfied regarding pensions, loans, deferred compensation, unemployment, etc.

6.6.J HEALTH AND VITAL STATISTICS DIVISION

The Health, Vital Statistics and Welfare Division is located in the Upper Level of the

municipal complex. This Division is under the direct supervision of the Director of Human Services in administration of operations. The Director of Human Services implements the policies and procedures set forth by the New Jersey Department of Health, the New Jersey Department of Environmental Protection and the Township Administrator that ensure the most cost-effective delivery of services to the residents of Bridgewater Township.

This office consists of a Director of Human Services, Health Officer, Registered Environmental Health Inspector Specialist/Registrar of Vital Statistics, Secretary and Office Assistant (as needed). Bridgewater has a contract with an autonomous agency for Health Officer services. The contract includes a part-time employee, 2 full-time assistants and 1 part time person for licenses and 1 full time registrar of vital statistics functions and 1 full time secretary.

The following duties are within the scope of services for this Division:

- The Division is responsible, under New Jersey regulation, to conduct communicable disease surveillance activities associated with certain reportable diseases. Further surveillance activities include the prevention of human and animal rabies and potential agents of bioterrorism. The Division maintains an interactive link with the New Jersey Communicable Disease reporting Surveillance System. The staff conducts the audit of school immunization records.

- Registrar of Vital Statistics maintains all local birth, death, marriage, civil union and domestic partnership records. The Registrar, with the assistance of the Deputy Registrar has the further responsibility to issue certified copies of these records under the direction of the State of New Jersey. The Registrar of Vital Statistics also is responsible for the issuance of disinterment permits.

- The Division of Health issues retail food licenses for all stationary and mobile food establishments within the jurisdiction. The Division reviews applications and issues licenses for all temporary retail food service operations for festivals and special events. A licensed Division staff member reviews plans for construction of new retail food facilities and renovations or alterations to existing establishments as required under New Jersey Code. Licensed retail establishments are inspected as required by the New Jersey State Sanitary Code. Hazard Analysis Critical Control Point (HACCP) audits are completed by certified staff from this Division.

- Under a shared service agreement with the Community Visiting Nurses Association, the Division provides for public health nursing services for older adults and child health conferences and immunization programs.

- In conjunction with allied public health agencies, the Division administrates and sponsors community public health education programs.

- Division of Health provides for the enforcement of New Jersey Public Health Practice Standards and environmental laws and regulations as dictated by New Jersey Code and Municipal Ordinance. Functions include the inspection of recreational bathing facilities, audits of youth camps and pet shops, rodent and mosquito investigations, vector control evaluations, Community Right-to-Know audits, plan review and inspection of the installation and repair of individual subsurface sewage disposal systems and individual potable wells. The Division also conducts +investigation and enforcement action as necessary for public health nuisance complaints. Further environmental health enforcement includes assistance in investigation when directed by the New Jersey Department of Environmental Protection and recognition as a Somerset County Environmental Health Act contract agency for air pollution control investigations, community noise audits, and water pollution investigations. The Division assists in the identification and remedial review of known contaminated sites. The Division of Health partners with Raritan Headwaters, a Garden State Laboratories certified laboratory, for the bacteriological and chemical testing of well water and provides education on the subject.

6.6.K RECREATION DEPARTMENT

The Recreation Department is located on the lower Level of the Administrative section of the municipal complex.

The Recreation Department offers recreation and leisure opportunities for all ages in an environment where young children can learn and prosper. Adult programs are geared toward offering various types of active and passive involvement.

This office is designated as a division of the Human Services Department and consists of a Superintendent, an assistant Superintendent, Recreation Specialists, and seasonal staff, as needed. This office evaluates and surveys the recreation programs/needs of residents is administers planning and organizing recreational opportunities/programs to meet these needs. This office is responsible for the scheduling of all Township fields and parks for recreation programs and outside organizations (Bridgewater Baseball/Softball, Bridgewater Soccer Association, Bradley Gardens Little Loop, Bridgewater Girls and Boys Lacrosse, Pop Warner, Bridgewater Football League, and many adult groups). Decisions which require shifts in plans due to inclement weather are made in this Department. Decisions regarding Township fields and parks and communicating to all participants, outside groups, and general public inclement weather decisions, Monday through Sunday, year-round are made quickly due to the contingency plans that are set up. This office is responsible for coordinating public relations with

with media, including that for special events. The Recreation Department reports a great deal of activity that has shown exceptional success for the Bridgewater residents. Responsibilities of the department include the following:

- Online registration and payment for all recreation programs has streamlined the enrollment process.
- Active involvement with the Municipal Alliance and Youth Services Commission with Lynne serving as Chair has been extremely successful.
- G.E.M. (Girls Empowerment through Mindfulness) is offered due to positive feedback.
- Continued Futsal program for our Bridgewater United Travel Participants in the winter months.
- Bridgewater Recreation's HS and Flag Rugby programs are reported to continue to gain popularity.
- The transition of 'Breathe', a youth yoga program previously supported by a competitive grant from the Youth Services Commission, is now a Township supported recreation program.
- The volleyball clinic for grades 5- 8, offered in partnership with Varsity Coach Romanak, is reported to be very popular and is now being offered in both fall and spring. Due to high demand, a similar program in the summer.
- Expanded offerings have been made in partnership with former NBA Player and Bridgewater Resident Eric Murdock to include high school, offensive skills, and shooting clinics.
- The Department created 66 Bridgewater In-Town Soccer teams and 68 In-Town Basketball teams (not including Kindergarten, 1st grade & HS participants for basketball).
- Wrestling Participation numbers increased due to a successful prior season and an increase in promotion of the program through its coaches and coordinator.

6.6.L PLANNING DIVISION

The Planning Division is located on the lower level, of the Administration portion of the municipal complex.

The Planning Division serves as the first step for development applications in the Township. The Planning Division consults on the procedures to be followed in the application process and serves as a source of record-keeping of all applications processed through the Township Planning Board and Zoning Board of Adjustment. The Planning Division also provides information to the general public as well as developers. General information relates to zoning district maps and the uses permitted in these districts. Developer inquiries are also addressed, usually on a more site-specific basis.

The Planning Division is comprised of a Land Use Coordinator who handles the daily duties of the Division. The Land Use Coordinator attends meetings and prepares

minutes of the Planning and Zoning Board of Adjustment. Currently, the Township Council and both the Planning Board or Zoning Board of Adjustment have utilized a consulting Township Planner who is a licensed Professional Planner in the State of New Jersey who customarily holds office hours a minimum of twice a week.

The Planner consults with the Director of Municipal Services, the Administration, public, and property owners. In addition, the Planner assists the Township in such duties as the review of applications submitted to the Planning Board and Zoning Board of Adjustment, assistance in the preparation of Master Plans, Reexamination Reports, Development Fee Spending Plans, and Zoning Ordinances. Single-topic assignments which are addressed by the Planner include formal responses to constituent questions on Affordable Housing (COAH) submissions, Open Space and Redevelopment initiatives.

Planning Division offers consultation on the procedures to be followed in the application process and serves as a source for record-keeping of applications processed through the Township Planning Board or Zoning Board of Adjustment. In many instances, developers desire to have professional consultation meetings which include design details that require thought and discussion with the Planner and Engineer. Such individualized meetings may also include representatives from Zoning the Code Department. These meetings are coordinated through the Planning Division and are funded through the developer's escrow account.

The Planning Division staff member provides information to the general public as well as developers. General information relates to zoning district maps and the uses permitted in these districts. Individual meetings with applicants are also arranged through the Planning Division in an effort to discuss those questions that require more specific information and guidance.

A Planning Division library was created in 2004 and is continually expanded for the purpose of keeping planning documents in a more organized fashion. A full inventory of the expanding library stock is available at the Planning Division. The Library has been inventoried and each document is now numbered and identified in catalog format.

The number of Planning and Zoning Board of Adjustment and Site Plan Waiver applications has fluctuated. Site Plan Waivers involve site modifications of a de-minimis nature that meet specific eligibility criteria as set forth in the ordinance. The use of the Site Plan Waiver aids the developer by saving time associated with processing requests. It also saves the Board time by relieving it from reviewing matters of a minor nature.

6.6.M ZONING DIVISION

The Zoning Division has separate responsibilities and is a separate division, but

operates within the Planning Division and is located on the lower level of the Administrative portion of the municipal building.

The Division is comprised by the Zoning Officer who interprets and enforces Township Zoning Ordinances for the public and Township Departments. The Zoning officer will provide detailed information to property owners and guide those with land use questions through the permit process. Placement of accessory structures, patios, fences, pools, decks, retaining walls, generators, rooftop solar, and additions to new and existing homes are the most frequent issues. Fielding of general municipal services questions and proper direction to the appropriate department are provided in order to efficiently expedite inquiries. This office is under the supervision of the Director of Municipal Services. The employees in the Division are the Zoning Officer and four Deputy Zoning Officer.

This division is responsible for tracking and data entry into SDL (Spatial Data Logic) and creation of tracking records when required for projects that received Board approval and certain UCC Building Permits. The Zoning Division provides review of Planning Board and Zoning Board of Adjustment applications and make recommendations as requested/required.

In connection with submissions of Site Plan Waiver applications, the Zoning Officer makes recommendations regarding the applicant's request. The Zoning officer is responsible for intake, investigation, fee collection and issuance of Home Occupation permit requests.

For clothing donation bin applications, the Zoning Officer is responsible for intake, investigation, fee collection and issuance of permits. The Zoning Officer is responsible to process zoning applications for new and replacements signs and fee collection. Zoning Application Intake, review and issuance of shed, fence, patio, and retaining wall applications.

Final review for Certificate of Occupancy on new construction is part of the duties.
The Zoning Officer will answer Zoning questions via email, phone, scheduled meetings, and in person at the Zoning counter. Site inspections of questionable zoning issues that arise prior to CO are investigated. Property inspections generated by Zoning Officer and by resident complaints, issue summonses, if necessary, furnish report to Director of Municipal Services. The Zoning Officer will meet with municipal prosecutor to discuss summonses that warrant appearance in court by property owner to provide background and specifics of case. Attendance at Municipal Court for prosecution of violators. The Zoning Officer, in the capacity as Land Use Coordinator, provides oversight and training of the Planning Division Secretary regarding the MLUL and established Office Procedure.

A general description of the duties of the Zoning Officer are as follows:

- Process Home Occupation permits.
- Process Clothing Bin permits.
- Process shed, fence, patio, retaining wall and gazebo permits.
- Reviews applications for construction permits
- Reviews applications for Site Plan Waivers
- Offers zoning comments for applications before the Planning and Zoning Planning Board or Zoning Board of Adjustment, as needed.
- Continuing Education – Attends seminars for Zoning & MLUL updates throughout the Year as required maintaining Zoning Officer Certification.
- Updates "Complaint Types" in SDL to be an inclusive list of all types of complaints/violations.
- Enters all zoning approvals into SDL, including clothing bin renewals and home occupation renewals.
- Patrols the Township for illegal advertising signs and blight.

6.6.N DIVISION OF THE TAX ASSESSOR

The Tax Assessor is responsible for preparation of residential and nonresidential property values.
Organization/Staff: The Division has 2 employees.
1 Tax Assessor
1 Assistant to the Tax Assessor

6.7.O DIVISION OF REVENUE/TAX COLLECTION

The Tax Collector is responsible for preparation, distribution, receiving, depositing, recording and reconciling of tax, sewer utility, sewer assessments, sewer connections, liens and other municipal receipts.

Organization/Staff: The Division of Revenue is part of the Finance Department and has 2 employees: 1 Tax Collector and 1 Tax Clerk.

Major Functions /Responsibilities of the Tax Collector:

- Billing: Preparing, mailing and delivering the tax, sewer, assessment, connection bills and other bills associated with Bridgewater Township.
- Enforcement: Interest, penalties, fees and the Tax Sale are tools of enforcement exercised by the collector.
- Cashier/Collection: Collecting for all cash receipts. All entries are dated, recorded and delivered to the treasurer and bank within a 48-hour period.
- Reporting: Prepare, review and analyze on the first day of each month his collections. A report is delivered to the Chief Finance Officer every month to reconcile the receivable account.

6.6.P DIVISION OF PUBLIC WORKS

The Division of Public Works building is located on 411 Chimney Rock Road, Building A.

This is one of three buildings constructed in partnership with Somerset County and Bound Brook Borough. It includes a garage and offices. There are no reports of need to expand this facility, but annual Division reporting is designed to send an alert the Administration of potential future needs to modify its DPW facilities plan.

The Superintendent of Public Works reports directly to the Director of Municipal Services in administering the daily operation of the Public Works Department and its divisions: Road Maintenance, Vehicle Maintenance, Park Maintenance, Building Maintenance, Emergency Services, Library, Sewer Maintenance Division as well as the Community Service Program and Public Works' Employee Safety Program. It is the responsibility of the Superintendent to implement and oversee the policies and procedures for the daily operation of those divisions.

The Division of Public Works consists of one DPW superintendent, one assistant-superintendent, five foremen, one operator, three drivers, fourteen laborers (ten open positions), five mechanics, one sewer technician and one building technician.

Major Functions or Programs -

- Receive and record all resident complaints by phone, fax and e-mail; greet all visitors to the Public Works building;
- Prepare the Superintendent's correspondence and policies; interface with Somerset County Department of Public Works and Engineering, New Jersey Department of Transportation (NJDOT) and Utility Companies (PSEG, JCPL, NJAW, etc.), Somerset County Parks Commission;
- Oversee all contractors' work (catch basin repair, sidewalk repair, snow, etc.);
- Oversee operation of Yard Waste site;
- Manage all contracts with outside Contractors (paving, tree removal, deer carcass removal, garbage, etc.);
- Coordinate and schedule all department training and maintain records per PEOSHA regulations;
- Oversee Employee Safety Programs; coordinate attendance of all employees, including sick, personal, comp time and vacation;
- Coordinate Deer Carcass pick-up with outside contractor.
- The supervisor of the Employee Safety Program is responsible for administering the daily operation of the Public Works' Employee Safety Program.
- Manage and maintain 23 Parks and Recreation facilities and coordinate activities with the Recreation Department programs.

The supervisor or his designee is responsible for administering the emergency snow plow operation throughout the Township. The operation can have as few as seven salt and plow trucks in operation and as many as seventeen public works vehicles and up to eighteen contractor vehicles working at one time.

The Division of Road Maintenance under the Department of Public Works reports directly to the Superintendent and is responsible for the maintenance and renovations of approximately 215 centerline miles of municipal owned roads (approximately 630 streets); street sweeping all curbed roads with speed limits of 35 mph or greater monthly and residential roads at least once annually; the clearing of drainage easements where flow of storm water has been blocked; the maintenance of all Township storm drains to remove/prevent blockage of water flow including cleaning and repair of catch basins; the maintenance and various renovations of approximately 115 miles of sidewalks; minor drainage repairs; manage the Township bagged leaf program in November and December. This Division is responsible for maintenance and repair of all Township owned vehicles and equipment (70 autos and 74 trucks); maintenance and repair of all Township radio equipment; maintenance and repair of all Police equipment (overhead lights, wiring of all the police emergency lights, switch panels, the complete radio system and computers, etc.); responsible for the maintenance of various pieces of equipment, including special heavy equipment trailer units, air compressors, generators, heavy equipment consisting of one front end loader, one track hoe, three backhoes, three building generators, 26 salt spreaders, 45 snowplows, as well as109 smaller equipment items such as chain saws, welders, forklift, small generators, pole saws, lawn mowers, and tractors; the garage does most types of repairs with the exception of work on automatic transmissions, some truck spring work, vehicle alignments, body work, repainting of vehicles, some engine rebuilding or swapping engine computer controls which gets sent out along with any work resulting from a heavy backlog; handling of all motor vehicle registrations and inspections, vehicle accident claims, and vehicle insurance; fuel ID codes with Somerset County.

The Division of Park Maintenance reports directy to the Superintendent and is responsible for maintaining all Township parks and playfields. These parks and playfields include: Ardmaer Park (shown left), Alfred S. Brown, Bel Air, Cedarbrook, Chimney Rock, Crim, Darby Tract, Gene G. King, Glen, Kids Street, Harry Ally Memorial, North Bridge Street, Prince Rodgers, Peter Par, Rolling Knolls, Shady Lane, Somerville Manor, Thomae, Vo-Tech Commons Way fields and the Municipal Synthetic Turf Field); maintenance of grounds at the Senior Center, Somerset County Library and Municipal Complex Plaza, Municipal Synthetic Turf Field Area; coordination with Administration on events/programs at park sites; responsible for daily grass maintenance at all park sites, the Senior Center, Somerset County Library and Municipal Complex Plaza, Municipal Synthetic Turf Field, and the new Commons Way all-purpose fields; daily upkeep of bathroom facilities, irrigation lines and aerators in the parks; responsible for garbage removal at parks from the soccer, football, lacrosse, softball and baseball fields and/or facilities; responsible for tree plantings through various grants at park locations; responsible for repair to park and

playground equipment; renovation to ball field surfaces (i.e. seeding) after heavy use; outdoor maintenance of Township facilities (i.e. leaf removal and snow removal); maintenance of parks equipment (i.e., lawnmowers, weed whackers, blowers, chain saws, etc.); responsible for special events setup/cleanup (i.e., 5K Run, Veterans' Day ceremony at Chimney Rock Park, Memorial Day Parade at Ardmaer Park and Middlebrook Encampment on July 4th, etc.); responsible for setup/cleanup at all tournaments for Soccer, Lacrosse, Softball, Baseball, Cricket, and Rugby and opening day ceremonies; the coordination with outside organizations with their respective tournaments (i.e., Bridgewater Baseball Association Tournament, Little League Tournament, Bridgewater Lacrosse, Bridgewater Football League, etc.); responsible for construction of permanent park structures within the Township (i.e., safety pavilions, bathrooms, playgrounds, etc.); service and supplies Township summer camps; maintenance of the Middlebrook Trail; trimming and removal of all hazardous trees and limbs around Township parks, Township athletic fields and Township playgrounds; and weekly maintenance of the synthetic turf field at the Municipal Complex; maintenance of Municipal Complex Plaza Area, Library and Senior Center lawns. The Division repairs mailboxes after snow storms damaged by plowing the roadways.

The Division of Building Maintenance reports directly to the Superintendent. The Building and Maintenance Department is responsible for the upkeep and maintenance of Town Hall, the Police Department, Public Works, the Senior Center, the Library, Camp Cromwell, and the Hancock Preserve building. They are also responsible for the printing and replacement of street signs and regulatory road signs.

Library Maintenance. The Bridgewater Branch of the Somerset County Library Systems (SCLS) cleaning is provided by a contractor hired directly by the SCLS and does not report to the Township. Maintenance and repair work are performed or coordinated by the Division of Building Maintenance Foreman. The staff is responsible for the maintenance of the Bridgewater Branch of the Somerset County Library System on a daily basis.

The Senior Center Maintenance is performed by Division of Building. They also setup and breakdown tables and chairs for daily and weekly events, and assist with parking for outdoor events.

The Division of Sewer Maintenance Division is responsible for the maintenance of the entire municipal owned sanitary sewer system which encompasses approximately 450 miles of collector lines and 50 miles of trunk sewers throughout the Township; they respond to all sewer complaints 24 hours a day, 7 days a week; maintenance and repair of four pump stations; they maintain and repair 120+ individual grinder pump stations; responsible for cleaning and flushing 7,040 storm sewer basins and pipes; the cleaning and flushing of 450 miles of sanitary lines and manholes throughout the Township; and taking video of sanitary sewers and storm sewers as necessary.

6.6.Q FIRE SAFETY

The Chief Fire Marshal performs duties in conjunction with the Fire Sub Code Official and fire inspectors. The CSDMACFE inspector is non-NJ certified. There is one position open for a Fire Inspector.

This office is responsible for reporting to the Director on a monthly basis unless a specific incident or an emergency arises necessitating immediate reporting. The Fire Safety Bureau is tasked with but are not limited to, conducting annual, semi-annual and quarterly fire prevention inspections on state registered life hazard uses as defined under the NJ Uniform Fire Code, annual inspections on locally registered businesses, conducting cause and origin investigations of fires and explosions as required by N.J.A.C.5:71-3.3(25), reviews and issue fire prevention permits as required under the NJ Uniform Fire Code, reviews site plans for fire safety requirements for the Planning Board, Zoning Board of Adjustment. The Fire Safety Bureau also conducts fire safety training and education for Township employees, residents, civic groups, business, industry, daycare, and school facilities. The Fire Safety Bureau under the direction of the Fire Prevention Official ensures all life hazards and non-life hazard businesses are appropriately registered, attends required continuing education to maintain certifications, and files required reports, forms and certifications the NJ State Division of Fire Safety may require. Fire Safety coordinates any work with the Construction Official and as the Fire Protection Sub-Code Official to abate a violation which may require construction permits. The Fire Prevention Official or his designee serves on Emergency Management LEPC as the Fire & Hazardous Materials Representative. The Chief Fire Marshal serves as liaison between Township Administration and the Volunteer Fire Service and Joint Board of Fire Commissioners.

6.7.R SOMERSET REGIONAL ANIMAL SHELTER

The shared services shelter is officially located at 100 Commons Way. This is a building that was constructed after the Municipal Complex was constructed.

The Shelter is a not-for-profit municipal shelter provides:

- 24/7 animal control services
- Animal adoptions
- Trap Neuter Return for stray cats
- Animal surrender center
- Lost Pet Center with alert services
- Microchip education
- Behavior and Training advice

6.6.S DEPARTMENT OF MUNICIPAL SERVICES

The Director of Municipal Services oversees employee positions in the Municipal Services Division and in the Division of Public Works (DPW). The Director of Municipal Services is intimately involved with the operations of the each of the Divisions, including also managing issues related to Non-union, Union, Health and Vacation/Sick issues. The following individuals and divisions report directly to the Director of Municipal Services:

Department of Public Works

- DPW Superintendent
- Supervisor
- Receptionist/ Clerk
- Roads
- Building and Grounds
- Sign Shop
- Vehicle Maintenance
- Sewer
- Parks

Department of Municipal Services

- Assistant to the Director
- Engineering Division
- Planning Division
- Zoning Division
- Code Enforcement
- Fire Safety

6.8 RECOMMENDATIONS

1. As it relates to the Health and Vital Statistics Division, the Ordinance currently authorizes the Health Officer to *investigate* violations, but it has been determined that *enforcement* is still to be handled by the Zoning Officer. In order to maximize efficiency and take advantage of the specific, technical knowledge associated with the Health Officer, the Township should explore the feasibility of authorizing the Health Officer to enforce the matters that he/she investigates. In many instances, there are existing ordinances that would help facilitate enforcement.

PART 7

WATER AND SEWER UTILITY SERVICES PLAN

7.1 INTRODUCTION TO THE WATER AND SEWER PLAN ELEMENT

Bridgewater is served by two sewer treatment plants. The Somerset Raritan Valley Sewer Authority (SRVSA) serves the vast majority of properties in the Township and is located on Polhemus Lane, in the southerly portion of the Township. The SRVSA, established in 1958, is a regional wastewater treatment plant serving Seven communities. Bridgewater, Raritan and Somerville were charter members and the communities of Branchburg, Hillsborough, Manville and Warren joined after.

The Somerset Raritan Sewage Authority is governed by a Board of Commissioners, where each participating community is represented by two Commissioners. All Authority business is conducted at meetings of the Board of Commissioners who convene each fourth Monday of the month. Meetings are open to the public and begin at 7:30 p.m. Agendas are posted on the Authority bulletin board as well as published in local newspapers. Business office hours are from Monday through Friday from 8:00 a.m. to 4:00 p.m.

The SRVSA operates ad 23.9 MGD secondary advanced wastewater treatment system where sludge is managed with a fluidized bed incinerator. The SRVSA also accepts deliveries of graywater, septage and sludge. Incineration of residual wastewater solids is a primary method of sewage sludge disposal. This method creates a stable product that can used as landfill. Recent federal air emission requirements of 40 CFR Part 62 Standards of Performance for New Stationary Sources and Emission Guidelines for Existing Sources require that SRVSA reduce the incinerator mercury emissions by approximately 86%. In order to achieve this level of reduction, the SRVSA will construct and air pollution control system using carbon adsorption to scrub the incinerator flue gas before it enters the atmosphere. The design of the system was completed and notice to proceed

was issued in mid-2017. Construction was completed in 2019 and the Authority received final test results which confirmed that all results were in compliance with the SSI MACT Standards. The Project is now fully complete.

The Plainfield Area Regional Sewerage Authority (PARSA) serves a small section in the southeastern portion of the Township near Bound Brook Borough. The PARSA serves 8 municipalities including Bridgewater. PARSA was formed in 1995 as part of a Settlement Agreement to a lawsuit against the former public operating agency known as the Plainfield Joint Meeting. Today, PARSA operates a 12 MGD regional interceptor system. According to its website, it provides flow monitoring and CCTV inspection and I/I remediation at no cost to its members.

There are no package sewer treatment plants in Bridgewater Township.

7.2 WATER DISTRIBUTION SYSTEM

Surface waters that flow through Bridgewater are a potable water source. For this reason, and many others, protection of the quality of surface water is in the interest of all parties in the region. This also highlights the need for best management practices in storm water management.

Bridgewater Township receives its primary source of water service from the New Jersey American Water Company. NJ American Water has a 600,000-gallon storage tank located off Route 202/206 North which also serves Pluckemin.

7.3 RECOMMENDATIONS FOR THE WATER AND SEWER UTILITIES

1. A Study should be encouraged whereby the Township or SRVSA should monitor wastewater flows and inspect and remediate I/I locations where excessive flows are determined to be present. This can be a true benefit, particularly in the older section of the Township.

2. Continue oversight and analysis on inter-local agreements as it relates to shared sanitary sewer infrastructure.

3. Regularly evaluate and study sanitary sewer flow trends and capacities.

PART 8

HISTORIC PRESERVATION PLAN

8.1 INTRODUCTION TO THE HISTORIC PRESERVATION PLAN

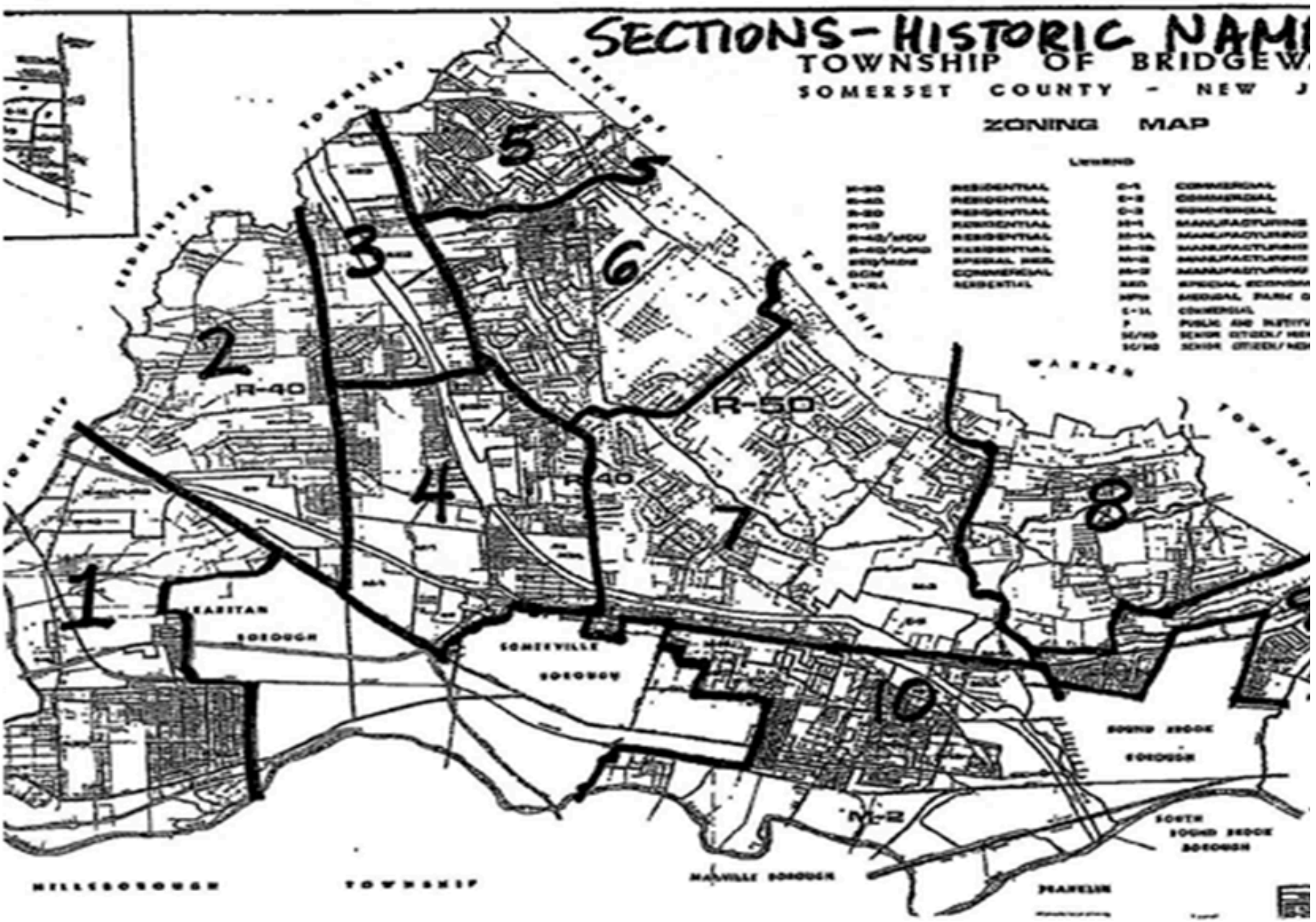
TThe Historic Preservation Plan Element of the Master Plan is prepared pursuant to NJSA 40:55D-28b (10) states:

"A *historic preservation plan element (a) indicating the location and significance of historic sites and historic districts; (b) identifying the standards uses to assess worthiness for historic site or district identification; and (c) analyzing the impact of each component and element of the master plan on the preservation of historic sites and districts.*"

The MLUL, N.J.S.A. 40:55D-65.1 also states that:

"A *zoning ordinance may designate a regular historic sites or historic districts and provide design criteria and guidelines therefore. Designation and regulation pursuant to this section shall be in addition to such designation and regulation as the zoning ordinance may otherwise require.*"

Bridgewater has recognized the names of contributing members of the community by way of its road naming ordinance. Roads must be taken from the historic registry unless the Planning Board agrees that there is particular meaning to an alternate name. Below is the listing of historic names and historic districts that are appropriate for the names.


SECTIONS-HISTORIC NAM
TOWNSHIP OF BRIDGEW
SOMERSET COUNTY - NEW J
ZONING MAP
Legend
1
2
3
4
5
6
7
8
10
R-40
R-5D
M-2
RARITAN
BOROUGH
SOMERVILLE
BOROUGH
BOUND BROOK
BOROUGH
SOUTH
BOUND BROOK
BOROUGH
MANVILLE BOROUGH
MILLSTONE
TOWNSHIP

January-01

AVAILABLE STREET NAMES

AREA I
Alpi
Asch
Ascolese
Aukenburg
Barzduk
Berlenback
Billis
Buccino
Bujak
Cartmel
Clarvoe
Coejman
DeAlfanso
DeSantelo
DeLombardo
Fialka
Fimmel
Gaboda
Greiff
Huck
Hulsizer
Kuchowski
Marotta
Milewski
Mizov
Opie
Paganessi
Passarela
Poggi
Runk
Schulze
Slack
Spanenberg
Tyzczak
Waiko
Woltevate

AREA II
Bacom
Brush
Cox
Dalrymple
Duchees
Dumont
Ely
Gaddus
Little
Low
Nevius
Purdy
Quick
Sloan
Stoven
Sydan
Van Pelt
Whitenack

AREA III
Alond
Benbrook
Crammer
Henrickson
McCullough
Pieson
Smith
Titus
Van Ardsdale
Wortman

AREA IX
Codrington
Cusik
Godwin
Grear
Kinscole
Lamey
Mather
Milligan
Ross
Rounde
Smock
Synder

AREA IV
Bahr
Castner
Ebel
Frelinghuysen
Hooper
Huff
Julliffe
Michael C. Kredovski
Naughton
Perlee
Phillips
Runkle
Stoudt
Talamdge

AREA V
Depoe
Dunham
Dunster
Elliot
Eoff
Goltry
Hutchinson
Melick
Teeple
Truesdale
Van Dyke

AREA VI
Bache
Beddow
Blaufus
Cass
Dubois
Fulkerson
Graff
Griffith
Hann
Hawley
Higgins
Honeyman
Jenkins
Kalfur
McEowen
Tilden
Smalley
Wagoner
Westman

AREA VII
Blum
Bwins
Coether
Doty
~~Eddy~~
Gailbraith
Guerrin
Hoyt
Hieber
Hight
Housel
Kugler
Kuhn
Linderberry
McCord
Samuels
Teishlar
Trainer
Vochelle
Warburton

AREA VIII
Chubles
Conway
Cusart
DeAlaman
Doernberg
Hough
Krielander
Lyng
McCann
Molloy
O'Higgins
Opdyke
Stieler
Stine
Somans
Thum
Umer
Walapert
Wiedemer

AREA IX
Codrington
Cusik
Godwin
Grear
Kinscole
Lamey
Mather
Milligan
Ross
Rounde
Smock
Synder

AREA X
Ames
Ammerman
Auten
Coates
Cuckolds
Gateville
Greene
Halladay
Harris
Herberts
Joerges
Lord
Reade
Remer

BRIDGEWATER HISTORIC STREET NAMES

AREA 1
1 Burr
2 Colmart
3 Coejeman
4 Dalley
5 Dennis
6 Dilts
7 Duke
8 Dunn
9 Elmendorf
10 French
11 Hogeboom
12 Johnson
13 Kenny
14 Lane
15 Langon
16 Larsen
17 Mc Bride
18 Opie
19 Paterson
20 Reading
21 Riddle
22 Runk
23 Staata
24 Stech
25 Strull
26 Studdiford
27 Ten Broek
28 Whortley

AREA 2
1 Bacon
2 Bell
3 Brush
4 Cox
5 Dalrymple
6 Duchess
7 Dumont
8 Ely
9 Gaddus
10 Little
11 Low
12 Nevius
13 Purdy
14 Quick
15 Shaffer
16 Sloan
17 Sydam
18 Stoven
19 Van Pelt
20 Whitenack

AREA 1 - BROOK
Walter's Brook

AREA I
Bertran
Billis
Kershaw
Wendover
Woodward

Somerset County Historic Society
John Matycla, Trustee
179 Finderne Ave.
Bridgewater, NJ 08807
Bridgewater Township Historian

As of July 1, 1994, all historic sites and historic districts designated in the zoning ordinance shall be based on identification in the Historic Preservation Plan Element of the Master Plan, unless the governing body adopts an inconsistent ordinance by majority vote of its full membership and records its reasons in the minutes of the resolution.

Bridgewater Township does not have any designated historic districts and therefore has not developed standards for construction and reconstruction of buildings with historic significance. Bridgewater Township does have elements of interest are worthy of study and possible designation of historic sites.

8.2 HISTORIC CEMETERIES

As part of a badge project for the Boy Scouts of America, J.D. Koblan, a Life Scout, BSA Troop 154, researched and published his document entitled, Old Burial Grounds of Bridgewater Township a survey of ancient and historic family cemeteries of Bridgewater, NJ. This well-documented research included several historic family burial plots that are in existence today.

- Bolmer family burial ground
- Castner-Compton cemetery
- Lane family burial ground
- Mountain Top cemetery
- Prince Rogers cemetery
- Vanderveer family burial ground #1
- Vanderveer family burial ground #2
- Van Pelt burial ground
- VanVeghten-Davis burial ground
- VanVeghten-Smith burial ground
- Williamson-Ten Eick burial ground

The entire J.D. Koblan document, which also includes War Veterans and cemeteries that are no longer in existence, is available for inspection in the Planning Division Library as Document #33.

8.3 HISTORIC SITES AND HOUSES

The Somerset County cultural Heritage Commission provides background and specifics of those properties that are on the National and New Jersey Registers of Historic Places. The following are a list of historic homes and sites within Bridgewater and the surrounding Somerset County area.

The National Register of Historic Places is the official list of the nation's cultural resources worthy of preservation. A National Register was first established in 1935 by the Historic Sites Act, which directed the Secretary of the Interior to define those properties of national importance as National Historic Landmarks. The National Historic Preservation Act of 1966 expanded the nature of the National Register to include not only properties of national significance, but also districts, sites, structures, buildings and objects of state and local importance.

To implement the 1966 Act, the Governor of each state was asked to designate a State Historic Preservation Officer (SHPO) to work in partnership with the U.S. Department of the Interior's National Register Office. For New Jersey, the SHPO is the Commissioner of the Department of Environmental Protection. The New Jersey Register of Historic Places is the official list of New Jersey's cultural resources. Created by the New Jersey Register of Historic Places Act of 1970, the State Register is closely modeled after the National Register Program. Both Registers have the same criteria for eligibility, the same nomination form, and review process. Nearly every municipality in New Jersey has properties significant in architecture, history, archaeology, engineering and/or culture that are eligible for the New Jersey and National Registers.

The New Jersey and National Registers provide a degree of review and protection from public encroachment. Section 106 of the National Historic Preservation Act of 1966, as amended, provides for review of any federally licensed, financed or assisted undertaking for properties listed on or eligible for the National Register. The New Jersey Register law requires review of any state, county or municipal undertaking involving properties listed on the New Jersey Register. These reviews are designated to prevent destruction or damage of historic resources by public agencies. Inclusion in the National Register enables the owner of an income producing property to take advantage of certain federal tax benefits.

National Register nomination applications are prepared by individuals, cultural or historic organizations, government agencies and professional consultants. Completed applications are submitted to the Historic Preservation Office where staff reviews them for eligibility, technical completeness and substantive sufficiency. Property owners and county and local officials are notified and given an opportunity to comment. A public meeting is held for large historic districts.

Applications are then presented to the New Jersey State Historic Review Board for Historic Sites, which is made up of professionals in the fields of architecture, history, archaeology and landscape architecture. If passed by the State Review Board, the nomination application is prepared for the SHPO signature.

Once signed by the SHPO, the property is listed in the New Jersey Register and simultaneously recommended for the National Register. The nomination is then sent

to Washington for consideration for the National Register. Listings on the State and National Register fall into three categories: individual buildings and/or sites, districts, and multiple resources. A district may contain a handful or hundreds of resources. A multiple resource nomination may be organized by building type, a time period, or geography. Each property included in such a nomination must be individually eligible for the National Register.

The County encourages individuals, organizations and municipalities to nominate historic resources to the register so that our nation's past can be preserved for future generations.

8.3.A MIDDLEBROOK ENCAMPMENT

The Middlebrook Encampment, Mountain Avenue is designated as NR 7-5-75 SR 5-8-75 on the National and New Jersey Registers of Historic Places. This area was the scene of two encampments of major portions of Washington's Continental Army during the early summer of 1777, and during the winter of 1778-1779. In May of 1777 Washington moved his entire army into Somerset County. The largest portion of his forces (approximately 5,000 troops) was stationed just north of Bound Brook (Middlebrook). The presence of the American Army, at Middlebrook foiled the British plans for taking Philadelphia in the spring of 1777. This delay also prevented the British from reinforcing Burgoyne's Army moving south from Canada and contributed to his defeat and capture at Saratoga, New York, in October 1777, one of the major turning points of the war. In December of 1778 the portion of the American Army, under direct command of General Washington, returned to Middlebrook. Almost 10,000 soldiers were encamped at Middlebrook and other areas of the county (known as the Middlebrook Cantonment). Unlike the previous year at Valley Forge, the winter was remarkably mild and supplies were for the most part plentiful. The encampment was significant for several reasons, among which were the establishment of the first military training academy for artillery officers (Pluckemin), the first training program for army surgeons and the formation of the Continental Army's first light-infantry corps under General Friedrich von Steuben. When the 13-star flag was officially adopted by Congress in 1777, the first place it was flown over Continental troops was at Middlebrook. The Washington Campground Association and Somerset County own portions of the encampment.

8.3.B VAN DER VEER-HARRIS HOUSE

The Van der Veer-Harris House, U.S. 206, is designated as NR 3-12-08 SR 12-19-07. This handsome house was perhaps constructed by Dr. Lawrence Van der Veer, or one of his sons, in the post-revolution Federal era in the mid to late 18th century. The house has undergone many changes but still retains its well-detailed Federal-style doorway with a fan detail over the- door, fluted pilaster and leaded sidelights on the southern or main entrance. The north facade has a circa-1950 New England-

style broken-scroll pediment and a Palladian window at the stair landing. The interior features a broad center hall extending from the front to the rear doorway with a dramatic elliptical arch supported by reeded pilasters. In the 1950s, the two east rooms were combined into one and furbished with an entirely new and elegant paneled chimney wall with a Federal-style mantelpiece. These changes were designed by architect Chester A. Patterson. Dr. Lawrence Van der Veer is the son of Jacobus Van der Veer, who initially established a prominent farmstead on this site prior to moving to Bedminster, where he established a mill. Dr. Van der Veer was one of the original members of the New Jersey Medical Society in 1776. He gained prominence for his development and successful application of a cure for hydrophobia (rabies). His son Henry, who inherited the property with his brother John, also was a prominent doctor in the area. The significant changes to the house in the 1950s were made by Dr. Robert Harris. The house is owned by Hillsborough Township and is currently being restored.

8.3.C VAN HORNE HOUSE

The Van Horne House, located at 941 Main Street, is designated at NR 3-8-02 SR 12-20-01. The present Van Horne House probably dates back to the late 18th century and was extensively remodeled in the middle decades of the 19th and 20th centuries. The 1930s and 1940s remodeling projects were in the Colonial Revival style and are especially significant. This site, known as “Phil’s Hill”, was named after Phillip Van Horne, a Bridgewater merchant.

It was the site of numerous important events during the Revolutionary War including a portion of the fighting during the Battle of Bound Brook, when British troops captured three American cannons on the front lawn. It was used at various times by Generals Lincoln, Stirling, Lee and Cornwallis. The house is owned by Somerset County and operated by the Heritage Trail Association.

8.3.D VAN VEGHTEN HOUSE

The Van Veghten House, 9 Van Veghten Road, is designated as NR 10-10-79 SR 7-21-79. Built in the early 1700s, this brick house served as headquarters for Quartermaster General Nathanial Green during the winter of 1778-1779. During the Middlebrook Cantonment (Second Middlebrook Encampment), Derrick Van Veghten quartered an entire division of American troops near the house. It was known, at that time, as one of the finest farmsteads in the area. It was originally a one-and-one- half-story dwelling that was widened and enlarged to two-and-one-half stories, probably prior to the Revolution. Derrick Van Veghten was the County Commissioner of Highways, a member of the Colonial Assembly and a member of the Grand Jury of the Court of Oyer and Terminer for Somerset County. It was updated to the Greek Revival style in the late 1830s by Richard Van Veghten. The Somerset County Historical Society and Heritage Trail Association now operate the site.

8.3.E VOSSELLER HOUSE

The Jacob Vosseller House (Indian Trail Inn/Castner Tavern), is located at 664 Foothill Road and designated as NR 1-23-86 SR 11-26-85. Jacob Vosseller built the original portion of the house sometime between 1753 and 1768. He operated the structure as a general store. The next owner, John J. Castner, operated it as a tavern starting in the early 19th century. It continued as a tavern under its next owner, William L. Allen. It is one of the best-preserved, pre-revolutionary commercial buildings in the area. The exterior still retains the original hand-split clapboard. In January of 1777, George Washington and the Continental Army passed this house on their way to Morristown. A marker is visible on the lawn which commemorates the march. The house has original pumpkin pine floors, exposed beams, fireplaces and a secret door. The house was added to the National Register of Historic Places on January 23, 1986 for this significance in architecture, commerce, settlement and transportation. It is now a private residence.

8.3.F BOLMER FARM HOUSE

The Bolmer Farm House is the last of the farm houses built by members of the Bolmer family. Settling there before 1799, the Bolmers were the first early Dutch settlers in the fertile Washington Valley. There is a historical marker located in Martinsville identifying the Bolmer Farmstead.

8.4 STATE, NATIONAL REGISTERY OF HISTORIC PLACES

The New Jersey Register of Historic Places and the National Register of Historic Places are the official State and Federal listings of the historic and cultural resources of the respective levels of government. There is a nomination process where the following criteria are used in the site and district evaluation:

1. Those districts, sites, buildings, structures and objects that possess integrity of location, design, setting, materials, workmanship, feeling and association, and:
2. That are associated with events that have made a significant contribution to the broad patterns of our history; or
3. That are associated with the lives of persons significant in our past; or
4. That embody the distinctive characteristics of a type, period, or method of construction, or that represent the work of a master builder, or that possess high artistic values, or that represent a significant and distinguishable entity whose components may lack individual distinction; or
5. That has yielded or may likely yield, information important in prehistory or history.

The National Historic Preservation Act of 1966 was amended, but provides for the review of actions by any federal agency which may affect these resources. Under this review, SHPO is provided the opportunity to comment on proposed actions, based on information provided by federal officials.

The New Jersey State Register provides for review of state, county and municipal actions affecting the State Register properties. A project which encroaches on a Sate Register property requires specific authorization by the Commissioner.

The Office of New Jersey Heritage offers local government certification to increase local participation in state and federal preservation programs. The Certified Local Government (CLG) offers municipalities an opportunity to receive matching grants. Information in the CLG program provides technical assistance in protecting historic resources.

8.5 RELATIONSHIP TO OTHER MASTER PLAN ELEMENTS

The Township has been fortunate in that there have been informal efforts to develop documentation of older sites. The Land Use Plan acknowledges the community benefit of older sites, including the Middlebrook Trail, and is therefore consistent with the Historic Preservation Plan.

The Recreation and Open Space Plan recognizes the attributes of the Middlebrook Trail and is therefore consistent with the Historic Preservation Plan.

The Conservation Plan recognizes the fragile nature of slopes and, by extension, the Middlebrook Trail. The Conservation Plan is therefore consistent with the Historic Preservation Plan.

PART 9

RECYCLING PLAN

9.1 INTRODUCTION TO THE RECYCLCING PLAN

The New Jersey Source Separation and Recycling Act, P.L. 1987, C102 was adopted, demonstrating the state's commitment to recycling. The purpose of the act is to establish environmental responsibility by reducing the tonnage of waste that will end up in the landfill.

The responsibilities are noted as follows:

a. Notification of persons occupying residential, commercial and institutional premises is required at least every six months of the recycling opportunities and source separation obligations identified in the ordinance.

b. Permit commercial and industrial facilities are exempt from the source separation requirements of the ordinance, if other provisions for recycling are arranged.

c. Review the municipal Master Plan development regulations are required at least once every 36 months and revise, if necessary, the provisions for the collection, disposition and recycling of recyclable materials.

d. Collection of recyclable materials is required to be offered.

e. The provision requires the adoption of a municipal ordinance and Recycling Plan Element.

f. A recycling coordinator should be appointed.

g. The ordinance should incorporate the goals of the State Recycling Plan

h. All subdivisions and site plan applicants must submit a report to the Township, indicating the tonnage that has been recycled during the calendar year. The report of the prior year recycling data should be submitted by April of each year

9.2 SOLID WASTE MANAGEMENT AND THE STATE DEVELOPMENT AND REDEVELOPMENT PLAN

The State Development and Redevelopment Plan sets forth policies for waste management and recycling. These policies and goals are:

1. Promotion of a reduction of the waste stream at the source through product design by eliminating or reducing the weight/volume of packaging materials.

2. Decreasing the toxic components contained within products and packaging. Increasing product durability, reuse and repair are also goals of the plan.

3. Resources should be conserved and the Township should promote the economic reuse of materials by promoting programs to recycle and reuse waste and by creating markets for recyclable materials. Encourage private industry to accept recyclables. Private industry should be encouraged the manufacture of products made from recyclable materials.

4. The Plan encourages governmental involvement to maximize the use of goods that are made from recyclable materials. The Plan also encourages involvement through private industry and residents as well.

9.3 SOLID WASTE MANAGEMENT AND SOMERSET COUNTY

Somerset County has adopted a Source Separation/Recycling Element. The goal is to achieve reduction of the residential waste stream through participation in the recycling program. There are standards set for residential and for nonresidential users.

The standards for non-residential uses are:

a. All non-residential solid waste shall be separated for disposition. At a minimum, the recyclable materials listed in Section 8 of the Source Separation/Recycling Element of the Solid Waste Plan shall be recycled.

b. Non-compliance with the requirements for nonresidential recyclables will result in penalties which are listed in Section 18 of the Solid Waste Management Plan.

The standards for residential uses are:

a. All residential generators of solid waste within Somerset County must source separate all recyclable materials as designated in the Somerset County District Solid Waste Management Program.

b. Disposition of the source separated recyclable materials by the residential generator shall be as prescribed in the Somerset County District Solid Waste Management Plan.

c. Failure to comply with either plan will result in penalties outlined in Section 18 of the Solid Waste Management Plan.

9.4 SOLID WASTE MANAGEMENT AND BRIDGEWATER TOWNSHIP

Bridgewater is committed to achieving the objectives of the State and County in order to reduce the waste stream. In keeping with those objectives, Bridgewater has adopted Chapters 106 and 107 of the ordinances for the mandatory source separation and for installing dumpsters and arranging for household trash removal.

Required separation includes newspapers, magazines, glass, aluminum, plastic, bimetal cans, batteries (household), corrugated cardboard, tin-plated steel cans, textiles and 'junk' mail.

The owner, operator or occupant of a commercial, professional, industrial or institutional establishment are required to recycle material as required under the Somerset County Recycling Amendment of December 1985 and P.L. 1987, c. 102.

The collection, removal and disposal of magazines, bimetal cans, tin-plated steel cans, plastic bottles, household batteries, newspapers, glass, aluminum, textiles and junk mail are to be supervised by the Administrator of the Township of Bridgewater or his/her designated agent, who shall have the authority to promulgate regulations establishing the time, method and routes of services. Homeowners' Associations, condominium associations and managers of multifamily dwellings or developments is to provide for collection in accordance with the regulations established by the Administrator of the Township of Bridgewater. The owner, landlord or manager of any office or commercial building are to provide for collection in accordance with the regulations established by the Township. All recycling containers shall be supplied by the Somerset County Recycling Office and placed prior to collection between the curb and sidewalk, where they shall be readily accessible to the collector on days specified for pickup.

The Somerset County Recycling Center is located on Polhemus Lane and is available and offers First Saturday drop-off events for Somerset County residents to recycle tires, scrap metal and usual curbside items from 8 am to 2 pm. The facility is closed at all other times. Proof of Somerset County residency is required (current driver's license, valid lease, tax bill or any other bill with a Somerset County address), but pre-registration is not required. No businesses allowed. No commercial vehicles are permitted at the First Saturday of the Month drop-off events.

9.5 RECYCLING PLAN RECOMMENDATIONS

1. Each subdivision and site plan should include a location for recycling in an enclosed space that has been confirmed to be adequately sized by the Township Health Officer. The ordinance should include specific measures

that assure that the recyclable materials will be routinely collected and the site will be kept clean and sanitary.

2. The ordinance states that regulations are to be in accordance with standards established by the Township Administrator. The ordinance should also identify the duties of the Township Recycling Coordinator who must submit recycling tonnage reports to the Township Council and to the New Jersey Office of Recycling by July 1 of each year.

PART 10

FARMLAND PRESERVATION PLAN

10.1 FARMLAND IN BRIDGEWATER

Bridgewater is not one of the five Priority Farming municipalities in Somerset County, but its municipalities has interest in preserving farmland. There are 28 properties that currently enrolled in the Farmland Assessment program. The listing of these properties is found within the Open Space and Recreation Element of the Master Plan (under separate cover). The Township purchased development rights for a large farm on Newmans Lane.

In the distant past, Bridgewater Township was a farming community. With the construction of the highway network, the installation of public sewers and water, the construction of major projects began, with townhouses, particularly in the Vanderveer section of the Township but also other areas as well. Farmland was sold off and development took place. Bridgewater has preserved some development rights for farmland on Newman's Lane. Other tracts have stayed in farming and have the benefit of receiving farmland assessment from the Township. Without large tracts of farmland left in the Township, the Township encourages farming on a small scale.

Community gardens are to be encouraged for fresh produce, including unique agricultural products such as a variety of peppers, exotic mushrooms, strawberries and blueberries, apples, some of which can be marketed at the Bridgewater's Farmers' Market.

PART 11

CLIMATE CHANGE-RELATED HAZARD VULNERABILITY ASSESSMENT

11.1 INTRODUCTION TO THE CCRHVA

In recognition of the critical need for climate science to inform land use planning, on February 4, 2021, Governor Murphy signed into law P.L. 2021, c6, amending the Municipal Land Use Law (MLUL) under N.J.S.A. 40:55D-28b.(2)(h). Effective immediately, municipalities are required to incorporate a climate change-related hazard vulnerability assessment into any Master Plan Land Use Element adopted after the signing.

The Township of Bridgewater will specifically address the following required components in their Climate Change-Related Hazard Vulnerability Assessment (CCRHVA):

1. Municipalities to analyze current and future threats to, and vulnerabilities of, the municipality associated with climate change-related natural hazards;

2. Include a build-out analysis of future residential, commercial, industrial, and other development in the municipality, and an assessment of the threats and vulnerabilities identified above related to that development;

3. Identify critical facilities, utilities, roadways, and other infrastructure that is necessary for evacuation purposes and sustaining quality of life during a natural disaster, to be maintained at all times in an operational state;

4. Analyze the potential impact of natural hazards on relevant components and elements of the master plan;

5. Provide strategies and design standards that may be implemented to reduce or avoid risks associated with natural hazards;

6. Include a specific policy statement on the consistency, coordination, and integration of the climate-change related hazard vulnerability assessment with certain other plans adopted by the municipality; and

7. Rely on the most recent natural hazard projections and best available science provided by the New Jersey DEP.

The Hazard Vulnerability Assessment aims to inform and guide the Township's Land Use Plan of the Master Plan. This assessment is developed using a step-by-step review of the natural hazards and the potential impacts on the Township's land uses and critical infrastructure. The objective is to enhance the Township resilience, minimizing costs and risks associated with these hazards for residents, emergency services, and employment centers.

11.2 IDENTIFICATION OF THREATS AND VULNERABILITIES

This section describes at a high-level the current and future threats and vulnerabilities faced by the Township, with a specific focus on climate change-related hazards such as increasing and extreme temperatures, shifts in precipitation and flooding, and that have the potential to place stress on infrastructure, natural resources, and social and economic systems.

11.2.A Increasing Temperatures

The warming of the atmosphere contributes to increased weather-related events such as heat waves and warm weather storms, and also has the larger-scale potential for global sea level rise and other ecological changes. As noted in the National Oceanic and Atmospheric Administration (NOAA), Climate Mapping for Resilience and Adaptation portal (CMRA), "heat has been the leading cause of weather-related deaths in the United States" over the last 30 years. Increased temperatures also impact air quality, vector borne diseases and agriculture among others (Rutgers 2022 State of the Climate Report).

Local temperatures can be amplified by the level of development in a community. The "heat island effect" is a phenomenon that is a major contributing factor to increased temperatures in highly urbanized areas. Heat islands occur when densely concentrated man-made structures and surfaces such as buildings, roads, parking areas, and similar materials absorb heat during the day and then radiate it back into the local atmosphere at night, resulting in higher temperatures than in rural areas. The surfaces in these heat islands can retain heat over the evening hours contributing to higher temperatures over subsequent days.

11.2.B Precipitation, Flooding, and Extreme Weather

A changing climate is anticipated to increase the likelihood of heavier rainfall events

and the potential for more severe weather conditions due to higher temperatures, which allow the atmosphere to hold more water vapor. These events can result in increased overall precipitation amounts, more frequent rainfall events in a shorter timeframe before drainage can convey the water, or increased frequency of severe events. All these impacts can lead to a higher risk of flooding, which occurs when a river, stream or other surface waterbody overflows or inundates an area, causing or threatening damage. Major flood events are characterized as extensive inundation of structures and roads, significant evacuations of people and/or movement of goods or personal property to higher elevations.

The heating of the Earth's atmosphere has the potential to change precipitation due to increasing ocean temperatures that then effect local precipitation circulation patterns. These changes are projected to increase the frequency and severity of precipitation events. The 2020 NJDEP Scientific Report on Climate Change (NJDEP report), noted the current yearly rainfall in the north and central portions of the state averages 49 inches. The report also states that annual precipitation is projected, under varying emission scenarios, to increase by approximately 5 to 7.5 percent by the end of the century, with some more local projections estimating between 4 to 11 percent by 2050. NOAA's National Centers for Environmental Information State Climate Summaries notes the total annual precipitation for New Jersey has been approximately 3.7 inches above average over the past 16 years.

The Northeast Regional Climate Center, a NOAA partner organization, conducted a study titled "Projected Changes in Extreme Rainfall in New Jersey" which concludes that there is a "high likelihood that precipitation will intensify throughout the century in all parts of the state". The following are findings reported in the NJDEP news release regarding the study dated November 18, 2021:

- Under a scenario of moderate increases in atmospheric warming of about 3.2˚F (1.8˚C), projections suggest that the amount of precipitation associated with the 100-year, 24-hour storm will increase by 20% to 25% in northern counties, on average.
- For the 100-year, 24-hour storm, the models suggest that there is a 17% chance that precipitation associated with this this type of storm will increase by as much as 45% to 50% in some counties.
- More frequent storms, such as the 2-year and 10-year, 24-hour storms are expected to see increases in precipitation intensity of 5% to 15% on average across the state by the end of the century

The NJDEP cites several studies of storms that "exceed the 10-year, 24-hour storm between 1950 and 2017 in the Northeast" which are categorized as more frequent events, have increased by 130 percent. In addition, these events are "anticipated to show greater variation in timing and spatial distribution due to climate change".

These variable conditions have a high likelihood of impacting the Township leading to potential flooding events and periods of drought.

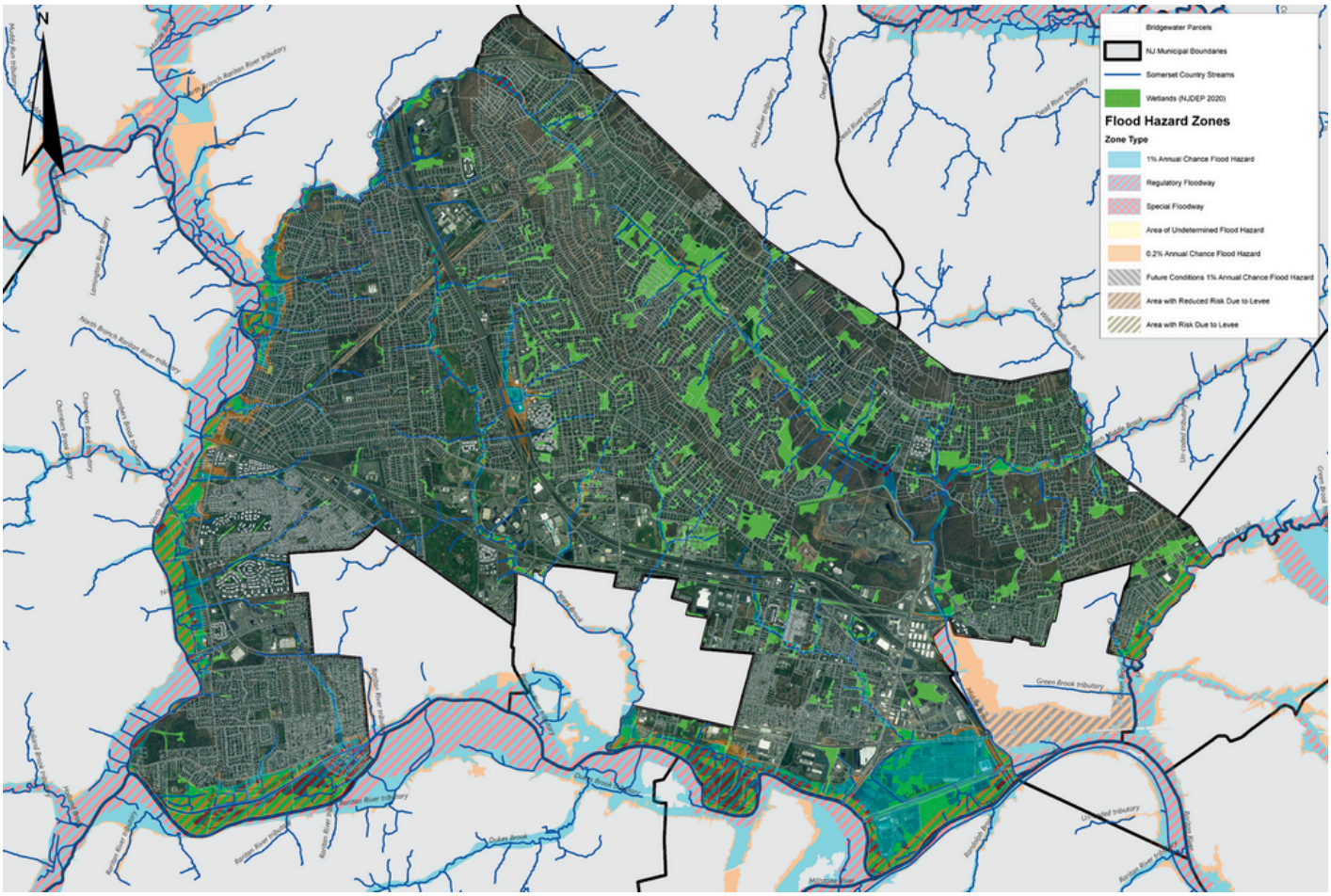
The impacts of precipitation are difficult to predict with certainty due to the numerous factors involved in climate modeling. However, seasonal extremes are predicted to have a more significant impact on areas susceptible to flooding. Land use planning will need to anticipate these seasonal extremes and adapt accordingly to ensure preparedness for public safety. For this hazard vulnerability assessment, precipitation and inland flooding impacts will be considered relative to the areas adjacent to, or within, qualified floodplains. The methodology used to identify such areas involved mapping of special flood hazard areas defined by the latest available from Federal Emergency Management Agency (FEMA). This assessment does not cover tidal flood or stream storm surge events, as the Township's geographic limits make it not susceptible to these specific hazards.

To fully understand the impacts of flooding and how they influence the nature of land use and land development within New Jersey, it is essential to be familiar with the terminology within the New Jersey Flood Hazard Area Control Act (FHACA). The rules within the FHACA, N.J.A.C. 7:13, (adopted on November 5, 2007 and amended June 20, 2016), determine where structures and infrastructure can be developed relative to the areas adjacent to, or within, flood hazard areas that exist along regulated waters that have a drainage area of 50 acres or more. FEMA defines a Special Flood Hazard Area (SFHA), as the area where the National Flood Insurance Program's (NFIP's) floodplain management regulations must be enforced and is also the area where the mandatory purchase of flood insurance applies. The SHFA is the area that would be inundated by a flood event having a 1-percent chance of occurring or being exceeded in any given year. The 1-percent annual chance flood is often referred to as the base flood or 100-year flood. Thus, the flood hazard area refers to the land and the space above that land that lies below the flood hazard area design flood elevation.

The flood hazard area design flood elevation (DFE) is a flood equal to the 100-year flood, with an additional amount of water in fluvial areas to account for potential future increases in flows due to development or other factors. This additional amount of water also serves as a safety factor in cases when the 100-year flood is exceeded. Structures, fill, and vegetation that are situated on land that lies below the flood hazard area design flood elevation are described as being "in" or "within" the flood hazard area.

The flood hazard area is also comprised of areas known as the floodway and the flood fringe. The floodway is an area of critical importance in the inner portion of the flood hazard area, and the flood fringe is located in the outer limits of the flood hazard area.

In the Township, the flood hazard areas coincide with the Raritan River, the North Branch of the Raritan River, the East and West Branches of the Middle Brook, Green Brook, Peters Brook, Cuckels Brook, and Chambers Brook, and Ross Brook as illustrated on the "Aerial Photograph and Environmental Constraints Map". The boundaries of the flood hazard area limits are illustrated with overlaying lot parcels with the FEMA SFHA data as identified on the Flood Insurance Rate Map (FIRM). These limits are intended to represent reasonable assumptions of the floodplain limits. It should be emphasized that the current rules outlined in the FHACA set the design flood elevation (DFE) as the higher of two options: 1) Flood elevation mapped by NJDEP, or 2) FEMA 100-year elevation plus 1 ft. Full size maps are available as part of the Appendix, as Volume 1.

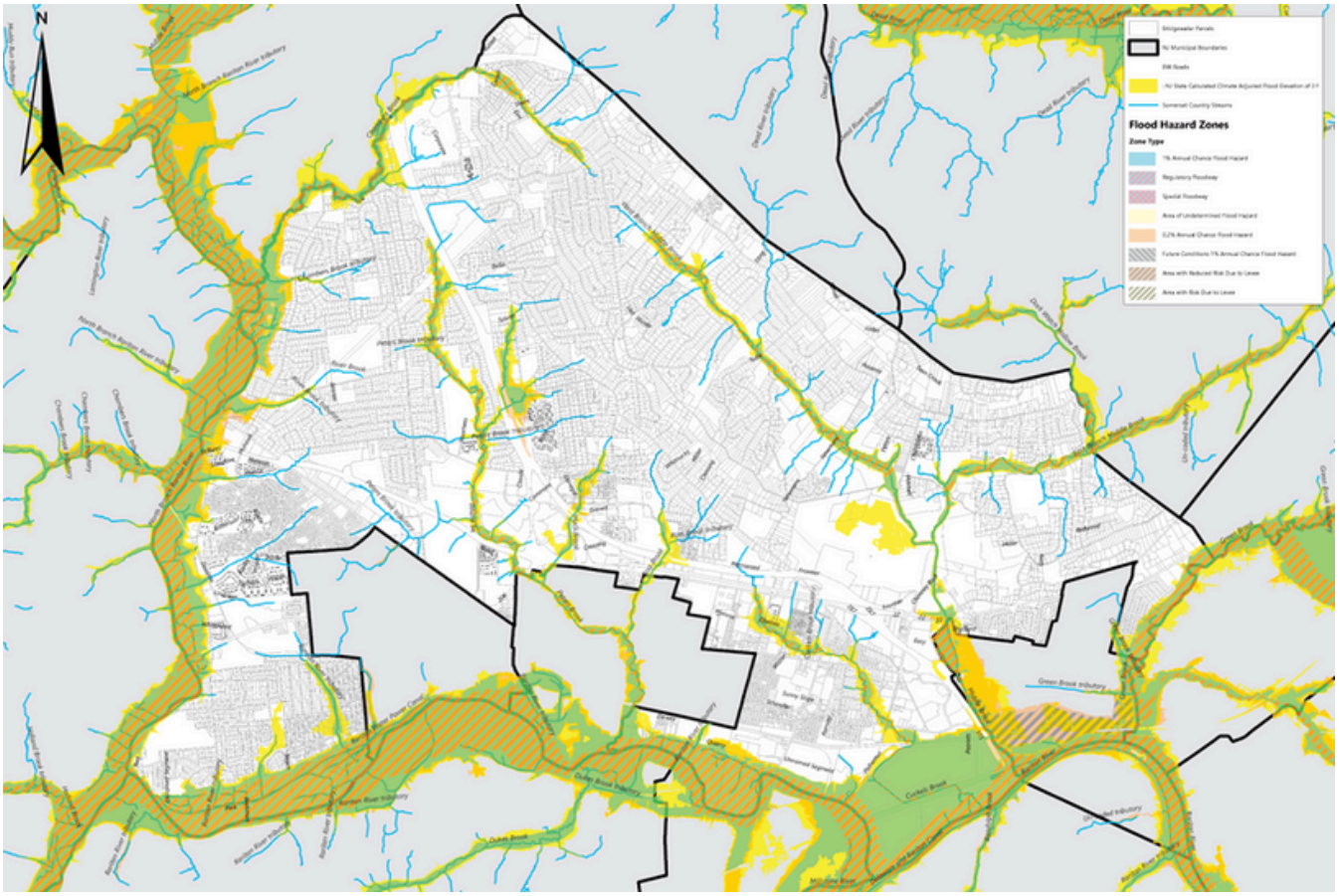


NJDEP has recognized that since the Fall of 2022, designs based on current flood mapping are inadequate and do not provide protection for current and future conditions. This is because the existing flood mapping reflects prior flooding patterns and does not account for more recent flooding events. For example, Hurricane Ida case studies show average elevations of 3.1 feet above FEMA's 100-year flood elevation.

In response to the recognition of the inadequacy of current flood mapping, the NJDEP drafted a new Inland Flood Protection Rule (Rule) in December 2022. The Rule, adopted in July 2023, implements the new flood hazard DFEs that raise the

flood elevation along streams and rivers by 2 ft above current standard mapped by DEP. The new DFE is therefore the higher of 1) Flood elevation mapped by NJDEP (where available) plus 2 ft; or 2) FEMA 100-year elevation plus 3 ft.

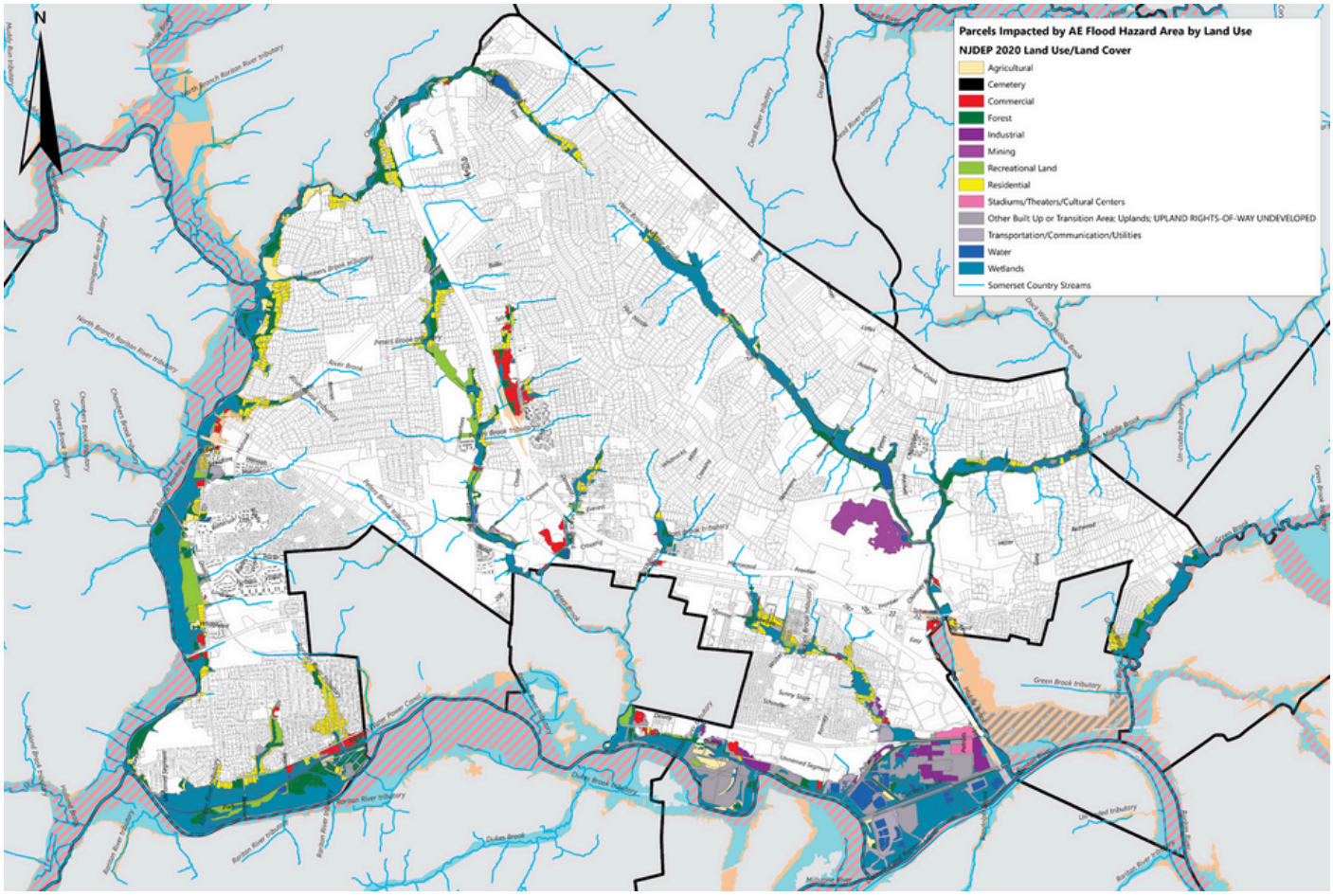
The Rule also mandates the use of future projected precipitation when calculating flood elevations and ensures that DEP's Flood Hazard Area permits conform to NJ Uniform Construction Code standards and meet or exceed minimum FEMA National Flood Insurance Program requirements. This new Rule also requires stormwater management infrastructure to be designed to manage runoff from both recent and future storms. The map provided illustrates the flood hazard areas. The blue and orange areas represent flood hazard areas as defined by FEMA, while the yellow areas represent the approximate areas of the climate adjusted potential flood elevation of 3 ft above the current DFE and highlight the potential areas of additional impact.



In consultation with the NJDEP, the NJ Climate Change Resource Center at Rutgers University prepared a new data layer consistent with the new 2023 DFE standard (1% Chance Annual Flood Plus 3 Feet) for inclusion in its NJADAPT suite of data visualization and mapping tools, as depicted in the above map.

The potential for increased extreme weather events leading to flooding can have a heightened impact on those properties that are in the areas of historic flooding or the Special Flood Hazard Area (SFHA). In addition, the areas surrounding these zones are also more likely to experience some effects of these trends. Based on the analysis of the parcel data and the SFHA with the NJ State Calculated Climate

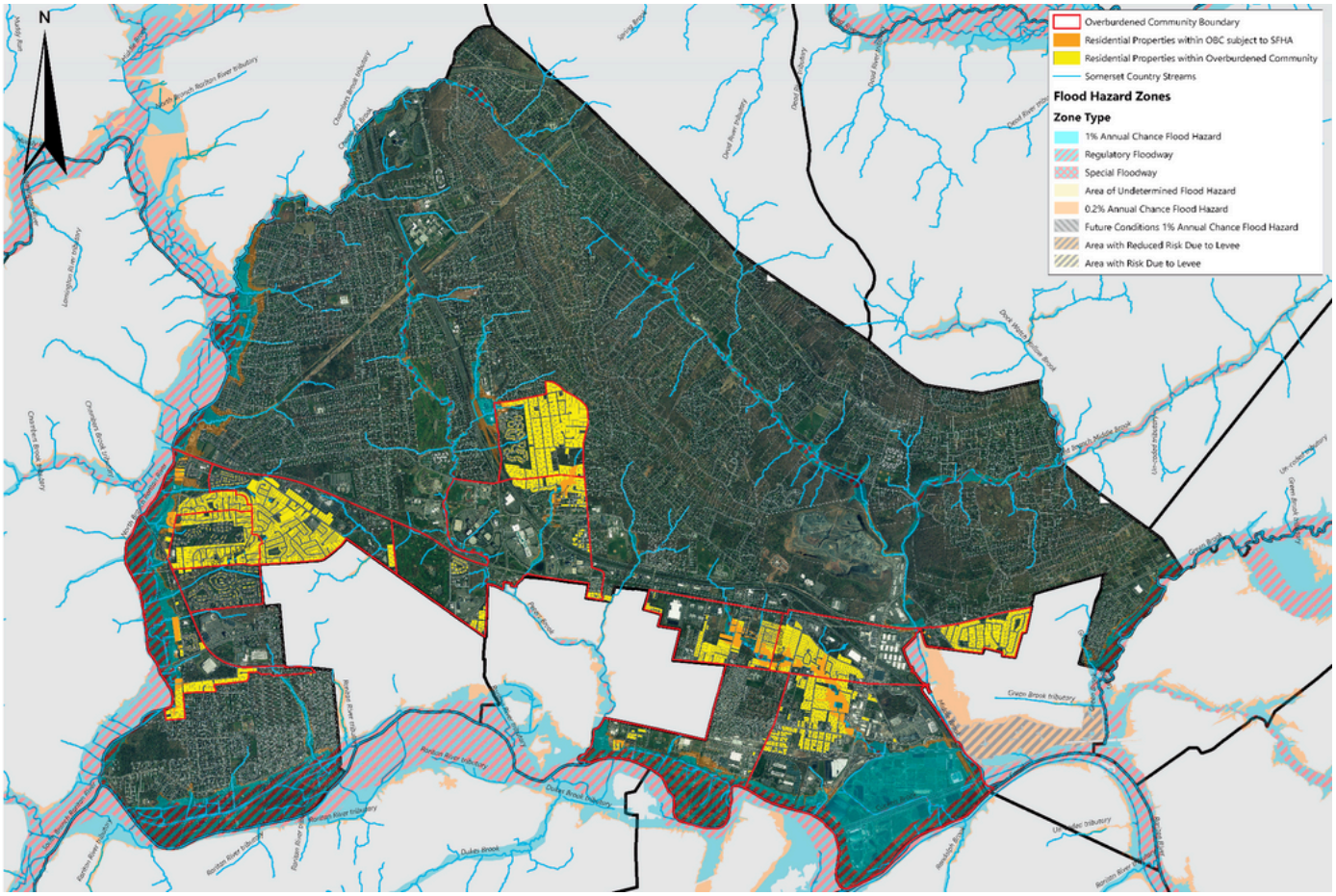
Adjusted Flood Elevations (CAFE) , approximately 2,029 parcels have been identified as at risk of flooding. A further analysis of the developed nature of the impacted parcels via an additional layer of the 2020 Land Use/Land Cover data from the NJDEP is indicated in the map below.



In accordance with the CCRHVA requirements, a review of potentially overburdened or socially vulnerable areas within the community was conducted to evaluate if there are any populations that may be disproportionately affected by flooding events. In 2020, the New Jersey Legislature passed the Environmental Justice Law, which defines “Overburdened Communities” as any census block group that meets one of the following criteria:

1. At least 35% of the households qualify as low-income households.
2. At least 40% of the residents identify as minority or as members of a State recognized tribal community.
3. At least 40% of the households have limited English proficiency

Census data was reviewed for all Block groups to determine any Census Block Group that met the criteria for an overburdened community. As depicted in the following map, certain CBGs are identified where at least 40 percent of the residents identify as minority or as members of a State recognized tribal community. Those portions of the CBG identified were further refined to show the residential properties within the boundary, as well as those impacted by the SFHA designation.

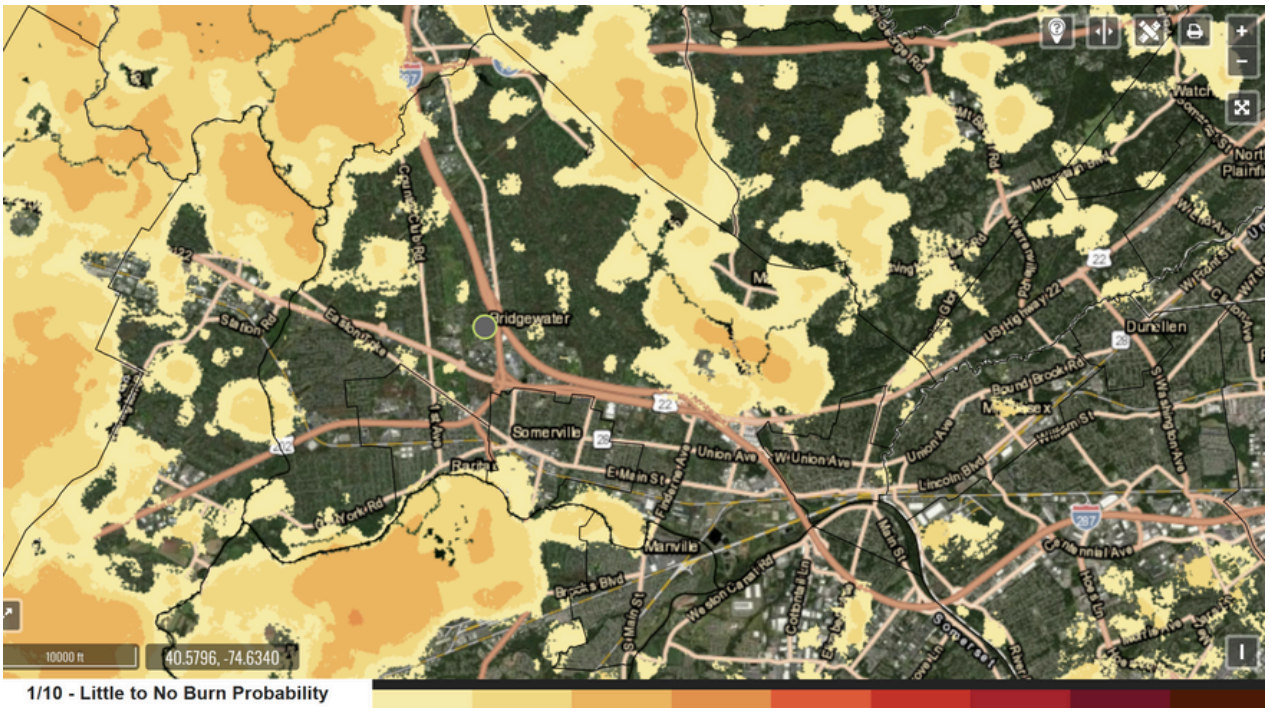


In addition to the recognized overburdened community parameters, Bridgewater Township has other socially vulnerable populations, including the steadily increasing aging population over 65 years of age. For this reason, the critical facilities section identifies assisted living and similar care facilities with elderly persons that may be under more threats during emergency events. It is important to consider certain portions of the population that may need special assistance since they have limited mobility, specific needs, or access to support networks during periods of storms or other natural events. As noted under the policy directives, it is encouraged that the Township advertise the ability to register with emergency response agencies that can enhance response capabilities and facilitate coordination of services.

11.2.D Drought

The increasing trend of climate warming has heightened the risk for extended periods of drought. A warming climate can have adverse effect on these wells and the availability of potable water (State of New Jersey 2019 All Hazard Mitigation Plan). Water conservation measures should be planned within this region, as these wells are finite and can be significantly impacted by the frequency of precipitation events.

The Rutgers 2022 State of the Climate Report for New Jersey notes that, “evaporation also increases with higher temperatures transferring water as vapor back into the atmosphere more rapidly, making rainfall less available for water storage, agriculture and other uses”. Additionally, ”increased temperatures and water demand will result in drier soils less suitable for agriculture and more conducive to wildfires”. The New Jersey Wildfire Risk Explorer is a tool that is publicly available through the New Jersey Forest Fire Service, and provides a rating for “burn probability”. As depicted in the snippet from the tool, Bridgewater largely falls into the “little to no burn probability”, with some portions categorized slightly higher but still “low”.



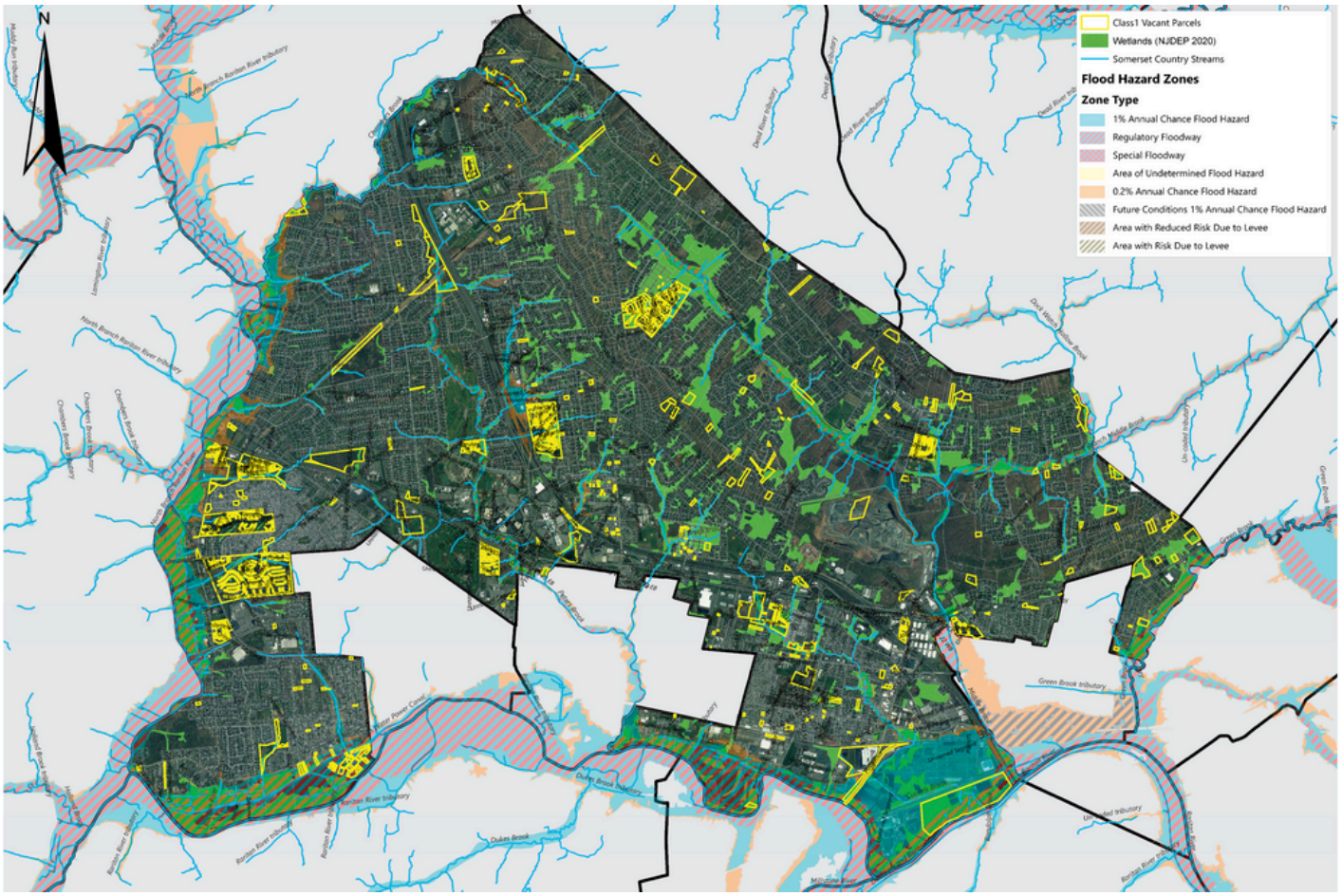
Periods of drought can lead to potential tree canopy dieback, or the accumulation of dried plant litter, which can serve as fuel for increased fire potential. It is important to monitor these conditions and assess if additional tree or related maintenance is needed to mitigate this risk. As observed during the recent wildfires in the western and northern portions of the continent, it is important to acknowledge that, due to prevailing wind patterns, a wildfire in the region could potentially impact air quality extensively. Such events have significantly diminished air quality in wildfire-affected areas particularly for vulnerable populations that may be more susceptible to these conditions - such as people with asthma or other respiratory conditions. Should the risk of wildfires increase, it may be necessary to issue air quality advisories based on the Air Quality Index (AQI). In the case of larger-scale events, shelters with filtration systems may be required to accommodate those who are unable to safely shelter in place.

11.3 BUILD-OUT ANALYSIS

The Municipal Land Use Law requires a municipality to conduct a build-out analysis when amending or adopting a Master Plan as part of the CCRHVA. The purpose of a build-out analysis is to project how much development could occur in a municipality if the maximum development was built on every available parcel of land permitted by local and state regulations. Specifically, the build out analysis applies the established zoning criteria to existing vacant lots and areas identified for infill development as envisioned by the Master Plan. This analysis provides an estimation of the anticipated level of development within the municipality. This Build-Out Analysis utilized guidance set-forth from the Association of New Jersey Environmental Commissions (ANJEC) "Smart Growth Survival Kit".

NJ MOD IV data contains information regarding the New Jersey Property Codes of all property classes in a given dataset. Property Class 1 is an indicator that a property is vacant and unimproved. Within the Township, there were a total of 331 parcels assigned as Class 1 for the purpose of conducting a build out analysis.

As shown in the map of the Class 1 parcels, many of the vacant parcels identified that may be developed are adjacent to or within areas highly susceptible to impacts of flooding, and may already include other restrictions to development such as steep slopes or wetland restrictions. These limits will likely reduce their development



potential and future buildout. Other Class 1 parcels include common areas for cluster developments and high density communities that are already built out. Finally, on properties without significant constraints, there existing approvals for single-family residential subdivisions that have not yet been completed.

Properties that are considered protected open space being a part of the Recreation & Open Space Inventory (ROSI) were not considered to be part of any build out analysis. The remaining parcels underwent further evaluation to assess their limitations due to environmental constraints such wetlands, floodplains, and steep topography to determine what portions of these properties were "developable."

Outside of vacant properties, estimating future infill development is difficult to determine due to the influence of economic, property ownership, and other variables. It is impossible to project this incremental future growth with accuracy. However, if additional development is pursued in areas prone to climate hazards, it is essential to consider and evaluate all potential impacts carefully and to avoid such development or to impose appropriate planning or engineering measures to offset impacts. Such measures should be incorporated by Ordinance where possible to ensure resilience to the potential impacts.

11.4 REVIEW OF CRITICAL FACILITIES

This section identifies the potential impact to "critical facilities, utilities, roadways, and other infrastructure that is necessary for evacuation purposes and sustaining quality of life during a natural disaster, to be maintained at all times in an operational state". This review is a required component of the MLUL requirements established by P.L. 2021, c.6. The specifics of these findings should be based upon the following questions as identified in the regulations:

a. What geographic areas of the municipality are potentially impacted?

b. What is projected to be developed as identified by the build-out analysis?

c. What is the level of risk to a specific land use or critical infrastructure?

d. What are the populations in the high-risk areas, particularly those that are more vulnerable to these impacts?

e. What is the estimated economic effect of the impacts?

f. What community facilities or infrastructure are in the most vulnerable areas of the Township?

g. What land use policies are needed to be amended or added to reduce or avoid impacts?

h. What policy statements should be related to county wide policies relevant to their hazard mitigation planning?

New Jersey state law requires each municipality to have a written Emergency Operations Plan (EOP). The EOP prepared and coordinated with the local Office of Emergency Management (OEM) coordinator, is a local level hazard planning approach that includes information on any potential risk or hazard the jurisdiction may encounter. The EOP is a hazard plan that includes information on any potential risk or hazard the jurisdiction may face. An analysis of the Township critical facilities as required by this analysis has identified the geographical areas that can be affected which are located within, adjacent or may be impacted due to the flood prone areas.

While the operational aspects of emergency management planning is covered more in the EOP, the Federal Emergency Management Agency (FEMA) released a guidance document known as the community lifelines construct. This construct includes a list of critical facilities for decisive intervention which prioritizes essential business and governmental functions crucial for human health, safety, and economic security during periods of hazardous conditions. This construct was deemed to more specifically define these critical facilities therefor used to verify if such facilities were prone to impacts. The following is an illustration provided by FEMA which outline such elements for consideration:

11.5 STRATEGIES AND DESIGN STANDARDS TO REDUCE OR AVOID RISKS

The Township has taken some proactive measures to address natural hazards and protect ecosystems that provide natural resilience. In addition, the mandated Emergency Operations Plan provides the review and administrative procedures and best practices in place to address the hazards that may come from a changing climate. The following summarizes the land use related strategies and design standards to be considered to reduce the risks and impacts from these changes.

1. Land Use Policies, Goals and Objectives

- Support the Master Plan Land Use Plan goals and objectives to preserve environmentally sensitive areas, avoid development in flood-prone zones, and encourage the use of sustainable techniques to mitigate climate impacts with regulations that address natural hazards and promote sustainable development practices.
- Integrate climate-responsive planning and design practices. Incorporate green spaces, shade trees, and reflective surfaces to mitigate the urban heat island effect, especially in the planned more densely developed areas of the Township.
- Incorporate mixed land use and compact development where consistent with master planned efforts and Township context to reduce the reliance on automobiles, decreasing heat generated by traffic and expansive parking lots.

2. Land Use and Related Regulations

- The Township has made updates to its Flood Hazard Reduction regulations in accordance with NJDEP standards.
- Enhance and advance sustainability practices by incorporating land use regulations that align with sustainable principals by utilizing energy efficient heating and cooling, minimizing waste, incorporating resource-efficient or recycled materials, and promoting water conserving design features.

3. Watershed Management

- Effective watershed management of the stream corridors are essential to address the impacts of changes in climate to local waterways. The streams and their floodplains act as stormwater management areas within the greater watershed, and their management plays a key role in mitigating potential flooding and protecting public health, safety, and welfare. The responsibility for managing such waterways is the purview of the NJDEP.
- Management efforts should include periodic de-snagging of the watercourses to remove fallen trees and debris that obstruct the flow of the streams. This coordinated management effort should be supported and promoted by the NJDEP.

4. Green Infrastructure

- Encourage implementation of what is categorized as green infrastructure such as green roofs, green walls, and permeable pavements. Such features can help absorb excess heat, reduce surface temperatures, minimize and delay runoff and enhance overall surface cooling.
- Establish and improve community gardens, parks, and green spaces to provide residents with cooling areas such as spray parks, shade structures and shaded areas for relief during heatwaves

5. Tree Preservation and Management

- The Township recognizes the importance of preserving existing tree vegetation and has maintained a robust tree protection and replacement ordinance.
- The Township should seek funding opportunities and promote initiatives aimed at tree resource management. The New Jersey Forest Service's Urban and Community Forestry Program offers financial assistance through grants, which can be utilized for various tree-related projects such as tree inventories, risk assessments, tree planting, and reforestation. By accessing these grants, the Township can enhance its tree management practices and ensure the long-term health and sustainability of its tree vegetation.
- Planting programs should incorporate planting of trees in public spaces, along streets, and in parks to maximize their cooling benefits for residents.
- Tree Pruning and Maintenance: Conduct tree pruning and maintenance activities to minimize the risk of falling branches and power lines during snow and high wind rain storms.

6. Energy Efficiency and Preparedness Measures

- Encourage energy-efficient practices in design and planning to reduce overall energy consumption and decrease heat emissions. Promote the use of energy-efficient appliances and lighting systems.
- Implement regulations that prioritize energy efficiency, including requirements for cool roofs and insulated structures.
- Develop and implement emergency power plans for critical facilities such as at the emergency shelters and municipal buildings. Consider backup power sources and generators.

7. Community Engagement and Vulnerable Populations

- Engage with community organizations to identify and address the needs of vulnerable populations, such as the elderly, fixed and low-income residents, during extreme heat events.
- Develop outreach programs to ensure that vulnerable populations are aware of available resources and assistance.

8. Heat-Resilient Infrastructure

- Design and upgrade infrastructure to withstand greater heat related conditions. This includes roads, bridges, and utility systems that may be susceptible to temperature-related stress.
- Consider heat-resistant materials for new infrastructure projects.
- Continue to implement shade tree improvement projects to offset the effects of impervious surfaces during high heat events and the improvements they offer to atmospheric conditions through carbon sequestration and oxygen production.

9. Green Transportation Initiatives

- Incorporate green transportation options that encourage walking, cycling, and public transit, to reduce heat emissions from vehicles.
- Add shaded bus stops and bicycle lanes where practical to encourage alternative modes of transportation.

10. Data Monitoring and Research

- Consider incorporating temperature monitoring stations in the municipality to collect and analyze local climate data. This information can inform future mitigation strategies and help assess the effectiveness and trends.
- Such stations could be coordinated with local school curriculum or clubs as a means for data gathering and community education.

11. Community Resilience Programs

- Develop community resilience programs that empower residents to take collective action in response to extreme heat events. This could include neighborhood initiatives, volunteer programs, and community-led projects.
- Provide resources and support for community-led initiatives that enhance local resilience.

12. Mutual Aid and Public Health Partnerships

- Maintain mutual aid agreements with neighboring municipalities to share resources, personnel, and equipment during extreme weather events. Collaborate on emergency response and recovery efforts.
- Collaborate with local health departments and healthcare providers to develop healthfocused interventions and responses to heat or extreme weather events.
- Share information about the potential health impacts of such events.

13. Evaluation, Adaptation and Post Event Recovery

- Regularly evaluate the effectiveness of implemented measures and adapt strategies based on changing climate conditions and community needs.
- Use feedback from residents, data analysis, and ongoing research to inform continuous improvement in heat mitigation efforts.
- Conduct post-event evaluations to assess the effectiveness of emergency response efforts, identify areas for improvement, and document best practices.
- Implement community recovery programs to support residents and businesses affected by winter storms. Provide resources, assistance, and guidance for recovery and rebuilding efforts

14. Management of Riparian Area Resources

- The vegetation in riparian areas plays a crucial role in mitigating the impacts of climate change. It helps to prevent erosion, reduce sedimentation, and filter pollutants, offering significant benefits to flood-prone areas. It is important to maintain these areas by preserving native plants and managing invasive species. Balancing the needs of public improvements with the preservation of riparian vegetation is crucial for ensuring the long-term resilience of these ecosystems.

15. Maintain and Improve Resiliency of Open Space and Recreation Areas

- Recreation and open space areas provide a substantial benefit to the health and wellbeing of the residents in the community It is important to promote improvements in these areas while also considering the need to enhance their resilience to potential flooding. Finding a balance between recreational enhancements and resilience measures is essential for the community's continued enjoyment of these spaces while mitigating the impacts of climate change.

16. Control of Invasive Plant Species

- Invasive vegetation species can negatively impact the various naturalized areas of the community potentially diminishing their effectiveness as buffers to runoff volume, water quality, and ecological balance.

11.6 POTENTIAL IMPACTS ON OTHER MASTER PLAN ELEMENTS

The projected impacts of climate change have implications for several elements of the Township's Master Plan. These impacts range from the impacts of land use specific goals and objectives to the assessment of the existing built environment. While the Township is not directly affected by coastal or inland storm surges, it has experienced significant weather and storm events and is still susceptible to impacts from those. It is crucial to consider these impacts when planning for land use and community infrastructure, with a focus on enhancing resilience and preparedness.

The relevant Master Plan elements include the Land Use Plan, Housing Element and Fair Share Plan, Circulation, Community Facilities, Water and Sewer Utilities, and the Historic Element. The following are potential impacts of climate change as it relates to some of these components.

11.6.A Land Use Plan

Land use designations in or near flood-prone areas will be the most impacted and require careful review. It is crucial to enforce the Township's current standards related to flood-prone areas to promote resilience and safety. Future land use planning should consider impacts of flooding and environmental encumbrances, and evaluate the feasibility and appropriateness of land use designations in these areas. Given the increased risks projected to public health, safety, and welfare, it is not recommended to encourage additional residential housing in these areas.

As residential and non-residential uses seek to expand their building footprints or floor areas through additions that require variance relief, the Township's Planning Board or Zoning Board of Adjustment should continue to consider the impacts of stormwater runoff and impose adequate stormwater management mitigation strategies.

The Township should continue to monitor flood-prone areas and analyze the potential for municipal and county programs that mitigate the effects on pre-existing residential structures in flood-prone areas, such as the NJDEP "Blue Acres" buyout program or other drainage improvements or maintenance strategies. If sufficient cumulative area becomes available through such buyout programs, these areas could be transformed into open spaces that serve as flood storage areas and incorporate riparian vegetation to improve water quality and enhance the stream corridor's ecosystem. The feasibility of non-residential land uses in consistently flood-prone areas may be unsustainable and require reconsideration in the land use plan. However, these considerations must be balanced with potential economic impacts on existing development and the practicality of implementing such changes.

11.6.B Housing Element and Fair Share Plan

The Fourth Round Housing Element and Fair Share Plan, adopted in June 2025, addresses the court-mandated planning for affordable housing from 2025 to 2035. The plan includes provisions for capturing additional affordable units and ensuring compliance the obligation by identifying various sites for inclusionary and 100% affordable housing. Some of the infill residential development identified in the 2025 Housing Element included the redevelopment of existing developed property. It is crucial that statewide affordable housing regulations are updated to incorporate all relevant environmental regulations that affect developable areas. It is recommended that residential development be located in areas deemed resilient and outside of zones prone to flooding or related impacts.

11.6.C Circulation

The Circulation and Transportation section of the 2020 Master Plan, identifies various road classifications and related infrastructure components. The areas of flooding are the most potentially impactful to the circulation and transportation in the Township. The Township's EOP and the County Hazard Mitigation Plan should continue to incorporate information and strategies that address circulation during storm events where certain roadways may be inaccessible from known historical flooding. In addition to the impacts of flooding on circulation component, it is important to emphasize the need to maintain power to all traffic signals during periodic power outages as a component to the safety and operations of intersections.

Access to mass transit is provided by the New Jersey Transit train station which provides two way rail service throughout the day on the Raritan Valley Line. Sources of mass transit are important components that can reduce the reliance on individual passenger cars contributing to the release of carbon into the atmosphere. Therefore the continued operation and improvement of mass transit facilities should be an important consideration in the effort to reduce impacts to the environment.

11.6.D Community Facilities Plan

This Plan Element provides a thorough review of all municipal facilities and services. The facilities reviewed include public facilities including ambulance and fire emergency services, police department, Office of Emergency Management (OEM) construction and planning department, department of public works, the municipal building, and the public library. In addition, the review of community facilities including the Township's shared services agreements with county and neighboring municipality entities.

The plan summary is comprehensive and the specific emergency services and OEM sections are particularly relevant to the issue of hazard vulnerability planning. The Township has a comprehensive plan that has been refined by various natural events and is being updated periodically to reflect recent conditions. The Township OCR department likewise maintains alert systems and manages several social media pages that can disseminate additional information during emergencies for the public.

11.6.E Water and Sewer Utility

This section of the Master Plan addresses the utilities in the Township. The public sewer infrastructure in the Township is sent to two sewage treatment plants - the SVRSA and PARSA. Bridgewater Township receives its primary source of potable water from the New Jersey American Water Company. NJ American Water has a

a 600,000-gallon storage tank located off Route 202/206 North which also serves Pluckemin. Surface waters that flow through Bridgewater are a potable water source. For this reason, and many others, protection of the quality of surface water is in the interest of all parties in the region. This also highlights the need for best management practices in storm water management.

The future planning of new infrastructure improvements should seek to avoid areas that are topographically impacted by potential flooding. Utilities that exist or cannot practically avoid areas of impacted flooding should incorporate construction techniques that reduce storm water intrusion or flooding impacts such as erosion.

11.7 SPECIFIC POLICY STATEMENT IDENTIFYING THE RELATIONSHIP TO OTHER PLANS

The most effective policy to reduce impacts of climate change is to reduce or eliminate development in locations that are prone to impacts. Understanding the historic pattern of a developed community, with some existing development adjacent to or in areas of influence or may be susceptible to changes, there is not a single approach to addressing these impacts. Instead, there are multiple approaches to reducing the impact as well as efforts to change or influence the contributing factors. The following is a summary of those items that are related to the specific land use related elements for consideration.

11.7.A Land Use Plan Policy Statement

The Township of Bridgewater seeks to limit development to that which is sensitive to the community's particular physical characteristics and preserves the Township's sensitive environmental features. In particular, the Township has implemented ordinance requirements that address and seeks to limit development within steeply sloped areas (defined to include any slope of minimally fifteen percent grade). Additionally, wetlands, flood plains, and the preservation of existing vegetation (particularly mature trees) are emphasized within the existing Land Development Ordinance.

Community facilities are essential to the operation of the Township and their continued enhancement and expansion is encouraged to ensure that public facilities are available to meet the needs of existing and future residents.

The following policy recommendations have been incorporated into the Land Use Plan Element:

1. Pervious Pavements. The Township has treated pervious pavements as part of improved lot coverage. The Township should consider the use of permeable materials that permit stormwater infiltration as an alternative to typical impervious

paving materials during site plan and subdivision review where deemed practical and appropriate and continue to conservatively treat pervious pavement as part of the improved lot coverage calculation.

2. Maintain Open and Pervious Area. Discourage infill development and expansion where it excessively impacts stormwater infiltration and the maintenance of light air and open space or excessively adds to the heat island effect of the area.

3. Sustainable Construction Practices. Reduce impacts to the environment through sustainable practices in building construction, pervious surfaces, efficient energy systems, alternative modes of transportation and sharing of resources such as parking where practical and in conformance with the Master Plan.

4. Stormwater Management. Continue to implement the requirements identified in the NJ Stormwater BMPs Manual and Stormwater Infrastructure Toolkit in new stormwater management systems.

5. Special Needs Population Emergency Outreach Program. Outreach through various media to encourage the registration of populations that may apply to the "Register Ready – New Jersey's Special Needs Registry for Disasters". This program allows New Jersey residents with disabilities or access and functional needs and their families, friends, caregivers and associates an opportunity to provide information to emergency response agencies so emergency responders can better plan to serve them in a disaster or other emergency.

11.7.B Relationship to Other Plans

Somerset County is in the process of updating and publishing its Hazard Mitigation Plan. Once the plan has been finalized, the Township will review the findings of that plan for consistency with the Township's own Hazard Vulnerability Assessment and address if any updates are necessary.

The Township will continue to coordinate with the County on the efforts to implement the County's hazard mitigation action strategy and participate in future plan updates as the needs arise.

APPENDICES

VOLUME 1

FULL SIZE MAPS FROM SECTION 11, CCRHVA

N

Bridgewater Parcels

NJ Municipal Boundaries

Somerset Country Streams

Wetlands (NJDEP 2020)

Flood Hazard Zones

Zone Type

1% Annual Chance Flood Hazard

Regulatory Floodway

Special Floodway

Area of Undetermined Flood Hazard

0.2% Annual Chance Flood Hazard

Future Conditions 1% Annual Chance Flood Hazard

Area with Reduced Risk Due to Levee

Area with Risk Due to Levee

Muddy Run tributary

Middle Brook

North Branch Raritan River tributary

Lamington River

Lamington River tributary

Chambers Brook

Dead River

Dead River tributary

Dock Watch Hollow Brook

Un-coded tributary

Green Brook tributary

Green Brook

Peters Brook

Raritan River tributary

Dukes Brook tributary

Dukes Brook

Middle Brook

Cuckels Brook

Randolph Brook

Millstone River

Holland Brook tributary

Holland Brook

N

Bridgewater Parcels

NJ Municipal Boundaries

BW Roads

: NJ State Calculated Climate Adjusted Flood Elevation of 3 f

Somerset Country Streams

Flood Hazard Zones

Zone Type

1% Annual Chance Flood Hazard

Regulatory Floodway

Special Floodway

Area of Undetermined Flood Hazard

0.2% Annual Chance Flood Hazard

Future Conditions 1% Annual Chance Flood Hazard

Area with Reduced Risk Due to Levee

Area with Risk Due to Levee

Muddy Run tributary
Middle Brook
North Branch Raritan River tributary
Lamington River
Lamington River tributary
Chambers Brook
Chambers Brook tributary
Russet
Gorell
Shore Elm
Corporate
Victoria
Dead River
Dead River tributary
Dead River tributary
Dead River tributary
Dead River tributary
Dock Watch Hollow Brook
West Branch Middle Brook
Long
Bunser
Lotter
Astante
Twin Crook
Bellis
Sylvan
Vail
Nicole
Tullo
Peters Brook tributary
River Brook
River Brook tributary
Benner
Voorhees
Claire
Bond
Claude
Commons
Donegal
Everest
Macs Brook
Crossing
Whitnacks
Miller
Crossing
Newmans
Newmans
Peters
Chamberlain
Mitchell
East Branch Middle Brook
Un-coded tributary
Green Brook tributary
Green Brook
Redwood
Miller
Grate
Skillwell
Salvatore
Monawk
Hannah
Marcia
Patterson
Ditis
Arbute
Ethicon Src
Bond
Peters Brook tributary
Ross Brook tributary
Ross Brook
Merriwood
Frontier
Chimney Rock
Frontier
287
287
22
22
22
Stratford
Easy
Monroe
Chelsea
Cuckels Brook tributary
Walter
Sunny Slope
Schindler
Ramsey
Dewey
Quarry
Unnamed Segment
Polhemus
Patriots
575
Middle Brook
Green Brook tributary
Green Brook tributary
Raritan River
Raritan River tributary
Raritan River tributary
Raritan River tributary
Raritan River tributary
Raritan Water Power Canal
Dukes Brook tributary
Cuckels Brook
Randolph Brook
Un-coded tributary
Raritan River
Raritan River tributary
Dukes Brook
Millstone River
Delaware and Raritan Canal
North Branch Raritan River
North Branch Raritan River tributary
Chambers Brook tributary
Chambers Brook tributary
Chambers Brook tributary
Peters Brook tributary
Porter
Double
Lindsley
Panhara
Vroom
Whitehead
Raritan River tributary
Holland Brook tributary
Holland Brook
Raritan River tributary
York
Unnamed Segment
Raritan River tributary
Park
Beekman
Raritan River tributary
Raritan River tributary
Raritan River tributary
Beech

N

Parcels Impacted by AE Flood Hazard Area by Land Use

NJDEP 2020 Land Use/Land Cover

- Agricultural
- Cemetery
- Commercial
- Forest
- Industrial
- Mining
- Recreational Land
- Residential
- Stadiums/Theaters/Cultural Centers
- Other Built Up or Transition Area; Uplands; UPLAND RIGHTS-OF-WAY UNDEVELOPED
- Transportation/Communication/Utilities
- Water
- Wetlands
- Somerset Country Streams

Muddy Run tributary
Middle Brook
North Branch Raritan River tributary
Lamington River
Lamington River tributary
Chambers Brook
Chambers Brook tributary
Peters Brook tributary
River Brook
River Brook tributary
Dead River
Dead River tributary
West Branch Middle Brook
Dock Watch Hollow Brook
East Branch Middle Brook
Un-coded tributary
Green Brook
Green Brook tributary
Cuckels Brook
Cuckels Brook tributary
Middle Brook
Raritan River
Raritan River tributary
Dukes Brook
Dukes Brook tributary
Millstone River
Delaware and Raritan Canal
Raritan River Water Power Canal
Holland Brook
Holland Brook tributary
Peters Brook
Cross Brook tributary
Randolph Brook
Bellis
Corporate
Victoria
Russet
Shore Elm
Sylvan
Nicole
Long
Lotter
Astante
Twin Crook
Newmans
Peters
Chamberlain
Mitchell
Miller
Redwood
Grate
Frontier
Merriwood
Chimney Rock
Stratford
Easy
Monroe
Chaska
Walker
Sunny Slope
Schindler
Ramsey
Dewey
Quarry
Unnamed Segment
Parrots
Pollhaus
Whitehead
Lindsley
Double
Bailey
Miller
Parker
Pinborn
Vroom
Patterson
Dilts
Mohawk
Hannah
Marcia
Stillwell
Spinatore
Park
Beekman
Bond
Claude
Commons
Pinegrove
Everest
Whitnacks
Crossing
Ethicon Inc
Northwest
Roosevelt
Nicole
Tolle
Volk
Bernie
Unnamed Segment
206
287
22
375

N

Overburdened Community Boundary
Residential Properties within OBC subject to SFHA
Residential Properties within Overburdened Community
Somerset Country Streams

Flood Hazard Zones

Zone Type

1% Annual Chance Flood Hazard
Regulatory Floodway
Special Floodway
Area of Undetermined Flood Hazard
0.2% Annual Chance Flood Hazard
Future Conditions 1% Annual Chance Flood Hazard
Area with Reduced Risk Due to Levee
Area with Risk Due to Levee

Muddy Run
Middle Brook
North Branch Raritan River tributary
Chambers Brook tributary
Chambers Brook
Spring Brook
Dead River
Dead River tributary
Dead River tributary
Dead River tributary
Lamington River
Lamington River tributary
Dock Watch Hollow Brook
East Branch Middle Brook
Un-coded tributary
Un-coded tributary
Green Brook tributary
Green Brook
Chambers Brook tributary
Chambers Brook tributary
Chambers Brook tributary
North Branch Raritan River
Peters Brook
Raritan River tributary
Raritan River tributary
Raritan River tributary
Raritan River tributary
Raritan River tributary
Raritan River tributary
Raritan River tributary
Raritan River tributary
Dukes Brook tributary
Dukes Brook
Middle Brook
Green Brook tributary
Cuckels Brook
Randolph Brook
Un-coded tributary
Raritan River
Raritan River tributary
South Branch Raritan River

N

Class1 Vacant Parcels
Wetlands (NJDEP 2020)
Somerset Country Streams

Flood Hazard Zones

Zone Type

1% Annual Chance Flood Hazard
Regulatory Floodway
Special Floodway
Area of Undetermined Flood Hazard
0.2% Annual Chance Flood Hazard
Future Conditions 1% Annual Chance Flood Hazard
Area with Reduced Risk Due to Levee
Area with Risk Due to Levee

APPENDICES

VOLUME 2

CLUSTER DEVELOPMENTS

File Map	Name	Block	Lot	Square Feet of Lot	2015 *Principal Building S.F. (not including accessory)	PRIOR F.A.R. (not including accessory)	Zone (2015)	File Map Front Yard	File Map Side Yard/Total	File Map Rear Yard
2868	Bound Brook Manor 1-Revsd	706	34	34281.72	3207	0.09	R-50	50	not on map	not on map
2868	Bound Brook Manor 1-Revsd	706	35	40162.32	4150	0.10	R-50	50	not on map	not on map
2868	Bound Brook Manor 1-Revsd	706	36	27268.56	3328	0.12	R-50	50	not on map	not on map
2868	Bound Brook Manor 1-Revsd	706	37	27573.48	3050	0.11	R-50	50	not on map	not on map
2868	Bound Brook Manor 1-Revsd	706	38	42166.08	3229	0.08	R-50	50	not on map	not on map
2868	Bound Brook Manor 1-Revsd	706	47	5270.76	0	0.00	R-50	50	not on map	not on map
2868	Bound Brook Manor 1-Revsd	706	48	5270.76	0	0.00	R-50	50	not on map	not on map
2868	Bound Brook Manor 1-Revsd	706	49	5270.76	0	0.00	R-50	50	not on map	not on map
2868	Bound Brook Manor 1-Revsd	706	50	5270.76	0	0.00	R-50	50	not on map	not on map
2868	Bound Brook Manor 1-Revsd	706	50.01	5270.76	0	0.00	R-50	50	not on map	not on map
2868	Bound Brook Manor 1-Revsd	706	51	458904.6	0	0.00	R-50	50	not on map	not on map
2850	Bound Brook Manor 2	706	26	32147.28	3195	0.10	R-50	50	not on map	not on map
2850	Bound Brook Manor 2	706	27	25221.24	3208	0.13	R-50	50	not on map	not on map
2850	Bound Brook Manor 2	706	28	26963.64	3417	0.13	R-50	50	not on map	not on map
2850	Bound Brook Manor 2	706	29	38637.72	3421	0.09	R-50	50	not on map	not on map
2850	Bound Brook Manor 2	706	30	33454.08	3282	0.10	R-50	50	not on map	not on map
2850	Bound Brook Manor 2	706	31	34325.28	3163	0.09	R-50	50	not on map	not on map
2850	Bound Brook Manor 2	706	32	37635.84	3104	0.08	R-50	50	not on map	not on map
2850	Bound Brook Manor 2	706	33	39683.16	3261	0.08	R-50	50	not on map	not on map
2851	Bound Brook Manor 3	706	16	32844.24	3248	0.10	R-50	50	not on map	not on map
2851	Bound Brook Manor 3	706	17	36372.6	3395	0.09	R-50	50	not on map	not on map
2851	Bound Brook Manor 3	706	18	62944.2	3288	0.05	R-50	50	not on map	not on map
2851	Bound Brook Manor 3	706	19	72963	3668	0.05	R-50	50	not on map	not on map
2851	Bound Brook Manor 3	706	20	34325.28	3497	0.10	R-50	50	not on map	not on map
2851	Bound Brook Manor 3	706	21	36372.6	3319	0.09	R-50	50	not on map	not on map
2851	Bound Brook Manor 3	706	22	25134.12	3307	0.13	R-50	50	not on map	not on map
2851	Bound Brook Manor 3	706	23	32974.92	3054	0.09	R-50	50	not on map	not on map
2851	Bound Brook Manor 3	706	24	36285.48	3080	0.08	R-50	50	not on map	not on map
2851	Bound Brook Manor 3	706	25	38158.56	2860	0.07	R-50	50	not on map	not on map
1609	Dutch Hollow Farms 1	439	23	64904.4	2776	0.04	R-40	50	not on map	not on map
1609	Dutch Hollow Farms 1	439	24	67953.6	2480	0.04	R-40	50	not on map	not on map

File Map	Name	Block	Lot	Square Feet of Lot	2015 *Principal Building S.F. (not including accessory)	PRIOR F.A.R. (not including accessory)	Zone (2015)	File Map Front Yard	File Map Side Yard/Total	File Map Rear Yard
1609	Dutch Hollow Farms 1	439	25	77101.2	2958	0.04	R-40	50	not on map	not on map
1609	Dutch Hollow Farms 1	439	26	43560	2542	0.06	R-40	50	not on map	not on map
1609	Dutch Hollow Farms 1	439	27	33105.6	2190	0.07	R-40	50	not on map	not on map
1609	Dutch Hollow Farms 1	439	28	33105.6	2496	0.08	R-40	50	not on map	not on map
1609	Dutch Hollow Farms 1	439	29	33105.6	2490	0.08	R-40	50	not on map	not on map
1609	Dutch Hollow Farms 1	439	30	33105.6	2490	0.08	R-40	50	not on map	not on map
1609	Dutch Hollow Farms 1	439	31	33105.6	2190	0.07	R-40	50	not on map	not on map
1609	Dutch Hollow Farms 1	439	32	33105.6	2994	0.09	R-40	50	not on map	not on map
1609	Dutch Hollow Farms 1	435	19	38768.4	2368	0.06	R-40	50	not on map	not on map
1609	Dutch Hollow Farms 1	435	20	41382	2490	0.06	R-40	50	not on map	not on map
1609	Dutch Hollow Farms 1	435	21	71874	2380	0.03	R-40	50	not on map	not on map
1609	Dutch Hollow Farms 1	435	22	90169.2	2380	0.03	R-40	50	not on map	not on map
1609	Dutch Hollow Farms 1	435	23	46609.2	2540	0.05	R-40	50	not on map	not on map
1609	Dutch Hollow Farms 1	435	24	43124.4	2242	0.05	R-40	50	not on map	not on map
1609	Dutch Hollow Farms 1	435	25	46609.2	2492	0.05	R-40	50	not on map	not on map
1609	Dutch Hollow Farms 1	435	26	40075.2	2631	0.07	R-40	50	not on map	not on map
1609	Dutch Hollow Farms 1	435	27	38768.4	2343	0.06	R-40	50	not on map	not on map
1609	Dutch Hollow Farms 1	435	28	110206.8	1848	0.02	R-40	50	not on map	not on map
1609	Dutch Hollow Farms 1	435	29	73616.4	2016	0.03	R-40	50	not on map	not on map
1609	Dutch Hollow Farms 1	435	30	118483.2	2528	0.02	R-40	50	not on map	not on map
1609	Dutch Hollow Farms 1	435	31	43124.4	1888	0.04	R-40	50	not on map	not on map
1609	Dutch Hollow Farms 1	435	32	43124.4	2304	0.05	R-40	50	not on map	not on map
1563	Dutch Hollow Farms 1-A	439	33	33105.6	2534	0.08	R-40	50	not on map	not on map
1563	Dutch Hollow Farms 1-A	439	34	34412.4	2190	0.06	R-40	50	not on map	not on map
1563	Dutch Hollow Farms 1-A	439	35	37461.6	2164	0.06	R-40	50	not on map	not on map
1563	Dutch Hollow Farms 1-A	439	36	41382	2438	0.06	R-40	50	not on map	not on map
1563	Dutch Hollow Farms 1-A	439	37	37897.2	2438	0.06	R-40	50	not on map	not on map
1563	Dutch Hollow Farms 1-A	439	38	99316.8	2132	0.02	R-40	50	not on map	not on map
1563	Dutch Hollow Farms 1-A	439	39	40946.4	2132	0.05	R-40	50	not on map	not on map
1563	Dutch Hollow Farms 1-A	439	40	40075.2	2550	0.06	R-40	50	not on map	not on map
1762	Dutch Hollow Village 1	440	11	45738	2398	0.05	R-40	50	20/50	75

File Map	Name	Block	Lot	Square Feet of Lot	2015 *Principal Building S.F. (not including accessory)	PRIOR F.A.R. (not including accessory)	Zone (2015)	File Map Front Yard	File Map Side Yard/Total	File Map Rear Yard
1762	Dutch Hollow Village 1	439	69	35719.2	3003	0.08	R-40	50	20/50	75
1762	Dutch Hollow Village 1	439	70	31798.8	2545	0.08	R-40	50	20/50	75
1762	Dutch Hollow Village 1	439	71	30056.4	2599	0.09	R-40	50	20/50	75
1762	Dutch Hollow Village 1	439	72	30056.4	2492	0.08	R-40	50	20/50	75
1762	Dutch Hollow Village 1	439	73	30056.4	2492	0.08	R-40	50	20/50	75
1762	Dutch Hollow Village 1	439	74	30056.4	2190	0.07	R-40	50	20/50	75
1762	Dutch Hollow Village 1	439	75	40946.4	2492	0.06	R-40	50	20/50	75
1762	Dutch Hollow Village 1	439	76	47480.4	2492	0.05	R-40	50	20/50	75
1762	Dutch Hollow Village 1	439	77	56192.4	2824	0.05	R-40	50	20/50	75
1762	Dutch Hollow Village 1	439	78	37461.6	2190	0.06	R-40	50	20/50	75
1762	Dutch Hollow Village 1	439	79	37461.6	2492	0.07	R-40	50	20/50	75
1762	Dutch Hollow Village 1	439	80	37461.6	2190	0.06	R-40	50	20/50	75
1762	Dutch Hollow Village 1	439	81	37461.6	2492	0.07	R-40	50	20/50	75
1762	Dutch Hollow Village 1	439	82	36590.4	2492	0.07	R-40	50	20/50	75
1762	Dutch Hollow Village 1	439	83	33541.2	2492	0.07	R-40	50	20/50	75
1762	Dutch Hollow Village 1	439	84	30492	2190	0.07	R-40	50	20/50	75
1762	Dutch Hollow Village 1	439	85	30056.4	2190	0.07	R-40	50	20/50	75
1762	Dutch Hollow Village 1	439	86	30056.4	2190	0.07	R-40	50	20/50	75
1762	Dutch Hollow Village 1	439	87	30492	2190	0.07	R-40	50	20/50	75
1762	Dutch Hollow Village 1	439	88	35719.2	2190	0.06	R-40	50	20/50	75
1762	Dutch Hollow Village 1	439	89	0	0	0.00	R-40	50	20/50	75
1829	Dutch Hollow Village 2	439	44	44431.2	2168	0.05	R-40	50	20/50	75
1829	Dutch Hollow Village 2	439	45	30056.4	2168	0.07	R-40	50	20/50	75
1829	Dutch Hollow Village 2	439	60	30927.6	2152	0.07	R-40	50	20/50	75
1829	Dutch Hollow Village 2	439	61	30056.4	3725	0.12	R-40	50	20/50	75
1829	Dutch Hollow Village 2	439	62	30056.4	2407	0.08	R-40	50	20/50	75
1829	Dutch Hollow Village 2	439	63	30056.4	2518	0.08	R-40	50	20/50	75
1829	Dutch Hollow Village 2	439	64	30056.4	2397	0.08	R-40	50	20/50	75
1829	Dutch Hollow Village 2	439	65	30056.4	2564	0.09	R-40	50	20/50	75
1829	Dutch Hollow Village 2	439	66	30056.4	2414	0.08	R-40	50	20/50	75
1829	Dutch Hollow Village 2	439	67	30056.4	2392	0.08	R-40	50	20/50	75

File Map	Name	Block	Lot	Square Feet of Lot	2015 *Principal Building S.F. (not including accessory)	PRIOR F.A.R. (not including accessory)	Zone (2015)	File Map Front Yard	File Map Side Yard/Total	File Map Rear Yard
1829	Dutch Hollow Village 2	439	68	30056.4	2480	0.08	R-40	50	20/50	75
1829	Dutch Hollow Village 2	440	1	51836.4	3124	0.06	R-40	50	20/50	75
1829	Dutch Hollow Village 2	440	2	49222.8	2099	0.04	R-40	50	20/50	75
1829	Dutch Hollow Village 2	440	3	44431.2	2940	0.07	R-40	50	20/50	75
1829	Dutch Hollow Village 2	440	4	36590.4	2264	0.06	R-40	50	20/50	75
1829	Dutch Hollow Village 2	440	5	35719.2	2818	0.08	R-40	50	20/50	75
1829	Dutch Hollow Village 2	440	6	34848	2278	0.07	R-40	50	20/50	75
1829	Dutch Hollow Village 2	440	7	33976.8	2872	0.08	R-40	50	20/50	75
1829	Dutch Hollow Village 2	440	8	33105.6	2628	0.08	R-40	50	20/50	75
1829	Dutch Hollow Village 2	440	9	32234.4	3449	0.11	R-40	50	20/50	75
1829	Dutch Hollow Village 2	440	10	37026	2302	0.06	R-40	50	20/50	75
1993	Dutch Hollow Village 3	439	46	31798.8	2194	0.07	R-40	50	20/50	75
1993	Dutch Hollow Village 3	439	47	49658.4	2564	0.05	R-40	50	20/50	75
1993	Dutch Hollow Village 3	439	48	53143.2	2632	0.05	R-40	50	20/50	75
1993	Dutch Hollow Village 3	439	49	31798.8	3049	0.10	R-40	50	20/50	75
1993	Dutch Hollow Village 3	439	50	31363.2	2818	0.09	R-40	50	20/50	75
1993	Dutch Hollow Village 3	439	51	32234.4	2508	0.08	R-40	50	20/50	75
1993	Dutch Hollow Village 3	439	52	45302.4	3050	0.07	R-40	50	20/50	75
1993	Dutch Hollow Village 3	439	53	64468.8	3184	0.05	R-40	50	20/50	75
1993	Dutch Hollow Village 3	439	54	64468.8	2848	0.04	R-40	50	20/50	75
1993	Dutch Hollow Village 3	439	55	71874	2576	0.04	R-40	50	20/50	75
1993	Dutch Hollow Village 3	439	56	45738	2514	0.05	R-40	50	20/50	75
1993	Dutch Hollow Village 3	439	57	37897.2	2809	0.07	R-40	50	20/50	75
1993	Dutch Hollow Village 3	439	58	34848	2645	0.08	R-40	50	20/50	75
1993	Dutch Hollow Village 3	439	59	30056.4	2424	0.08	R-40	50	20/50	75
2103	East Hill 1	625	23	26136	3228	0.12	R-50 (yes)	50	20/40	40
2103	East Hill 1	625	24	27007.2	2808	0.10	R-40	50	not on map	not on map
2103	East Hill 1	625	25	40510.8	3488	0.09	R-40	50	not on map	not on map
2103	East Hill 1	624	104	66995.28	2183	0.03	R-40	50	not on map	not on map
2103	East Hill 1	624	105	44431.2	2364	0.05	R-40	50	not on map	not on map
2103	East Hill 1	624	106	42078.96	2547	0.06	R-40	50	not on map	not on map

File Map	Name	Block	Lot	Square Feet of Lot	2015 *Principal Building S.F. (not including accessory)	PRIOR F.A.R. (not including accessory)	Zone (2015)	File Map Front Yard	File Map Side Yard/Total	File Map Rear Yard
2103	East Hill 1	624	107	37026	2848	0.08	R-40	50	not on map	not on map
2208	East Hill 2	625	1	36154.8	2983	0.08	R-50	50	20/40	40
2208	East Hill 2	625	2	23958	2770	0.12	R-50	50	20/40	40
2208	East Hill 2	625	3	24393.6	2918	0.12	R-50	50	20/40	40
2208	East Hill 2	625	4	23958	2714	0.11	R-50	50	20/40	40
2208	East Hill 2	625	5	36590.4	2916	0.08	R-50	50	20/40	40
2208	East Hill 2	625	6	24393.6	2838	0.12	R-50	50	20/40	40
2208	East Hill 2	625	7	24393.6	2973	0.12	R-50	50	20/40	40
2208	East Hill 2	625	8	27007.2	2736	0.10	R-50	50	20/40	40
2208	East Hill 2	625	9	32234.4	2962	0.09	R-50	50	20/40	40
2208	East Hill 2	625	10	38332.8	3052	0.08	R-50	50	20/40	40
2208	East Hill 2	625	11	27878.4	3247	0.12	R-50	50	20/40	40
2208	East Hill 2	625	12	30927.6	2270	0.07	R-50	50	20/40	40
2208	East Hill 2	625	13	32234.4	3051	0.09	R-50	50	20/40	40
2208	East Hill 2	625	14	31798.8	2868	0.09	R-50	50	20/40	40
2208	East Hill 2	625	15	31798.8	2892	0.09	R-50	50	20/40	40
2208	East Hill 2	625	16	31798.8	2714	0.09	R-50	50	20/40	40
2208	East Hill 2	625	17	44431.2	2728	0.06	R-50	50	20/40	40
2208	East Hill 2	625	18	29185.2	3144	0.11	R-50	50	20/40	40
2208	East Hill 2	625	19	29620.8	2582	0.09	R-50	50	20/40	40
2208	East Hill 2	625	20	27878.4	2656	0.10	R-50	50	20/40	40
2208	East Hill 2	625	21	27442.8	3141	0.11	R-50	50	20/40	40
2208	East Hill 2	625	22	319294.8	0	0.00	R-50	50	20/40	40
2208	East Hill 2	624	108	24829.2	2892	0.12	Open Space Lot			
2208	East Hill 2	624	109	24829.2	2714	0.11	R-50	50	20/40	40
2208	East Hill 2	624	110	36154.8	2714	0.08	R-50	50	20/40	40
2208	East Hill 2	624	111	46609.2	3092	0.07	R-50	50	20/40	40
2208	East Hill 2	624	112	42253.2	3259	0.08	R-50	50	20/40	40
2208	East Hill 2	624	113	32670	2941	0.09	R-50	50	20/40	40
2208	East Hill 2	624	114	34848	2433	0.07	R-50	50	20/40	40
2208	East Hill 2	624	115	29185.2	3572	0.12	R-50	50	20/40	40

File Map	Name	Block	Lot	Square Feet of Lot	2015 *Principal Building S.F. (not including accessory)	PRIOR F.A.R. (not including accessory)	Zone (2015)	File Map Front Yard	File Map Side Yard/Total	File Map Rear Yard
2208	East Hill 2	624	116	27007.2	2912	0.11	R-50	50	20/40	40
2208	East Hill 2	624	117	31798.8	2998	0.09	R-50	50	20/40	40
2208	East Hill 2	624	118	30492	2936	0.10	R-50	50	20/40	40
2208	East Hill 2	624	119	29185.2	2714	0.09	R-50	50	20/40	40
2208	East Hill 2	624	120	30492	3403	0.11	R-50	50	20/40	40
2208	East Hill 2	624	121	35283.6	3144	0.09	R-50	50	20/40	40
2208	East Hill 2	624	122	42688.8	2789	0.07	R-50	50	20/40	40
2208	East Hill 2	624	123	74052	0	0.00	R-50	50	20/40	40
2477	Eastfields	804	15	30579.12	3344	0.11	R-50	50	20/50	50
2477	Eastfields	804	16	26876.52	3572	0.13	R-50	50	20/50	50
2477	Eastfields	804	17	33410.52	3544	0.11	R-50	50	20/50	50
2477	Eastfields	804	18	23217.48	3546	0.15	R-50	50	20/50	50
2477	Eastfields	804	19	26702.28	3772	0.14	R-50	50	20/50	50
2477	Eastfields	804	20	27007.2	3344	0.12	R-50	50	20/50	50
2477	Eastfields	804	21	22651.2	3608	0.16	R-50	50	20/50	50
2477	Eastfields	804	22	23435.28	3088	0.13	R-50	50	20/50	50
2477	Eastfields	804	23	23435.28	3524	0.15	R-50	50	20/50	50
2477	Eastfields	804	24	22651.2	3736	0.16	R-50	50	20/50	50
2477	Eastfields	804	25	28706.04	3449	0.12	R-50	50	20/50	50
2477	Eastfields	804	26	30796.92	3558	0.12	R-50	50	20/50	50
2477	Eastfields	804	27	22825.44	2847	0.12	R-50	50	20/50	50
2477	Eastfields	804	28	22520.52	3594	0.16	R-50	50	20/50	50
2477	Eastfields	804	29	22912.56	3570	0.16	R-50	50	20/50	50
2477	Eastfields	804	30	28401.12	3449	0.12	R-50	50	20/50	50
2477	Eastfields	804	31	22825.44	3544	0.16	R-50	50	20/50	50
2477	Eastfields	804	32	23173.92	3578	0.15	R-50	50	20/50	50
2477	Eastfields	804	33	29533.68	3453	0.12	R-50	50	20/50	50
2477	Eastfields	806	1	29533.68	3524	0.12	R-50	50	20/50	50
2477	Eastfields	806	2	23348.16	3176	0.14	R-50	50	20/50	50
2477	Eastfields	806	3	24219.36	3524	0.15	R-50	50	20/50	50
2477	Eastfields	806	4	24916.32	4001	0.16	R-50	50	20/50	50

File Map	Name	Block	Lot	Square Feet of Lot	2015 *Principal Building S.F. (not including accessory)	PRIOR F.A.R. (not including accessory)	Zone (2015)	File Map Front Yard	File Map Side Yard/Total	File Map Rear Yard
2477	Eastfields	806	5	22738.32	3616	0.16	R-50	50	20/50	50
2477	Eastfields	806	6	25569.72	3449	0.13	R-50	50	20/50	50
2477	Eastfields	806	7	22520.52	3574	0.16	R-50	50	20/50	50
2477	Eastfields	806	8	23173.92	2678	0.12	R-50	50	20/50	50
2477	Eastfields	806	9	24829.2	3536	0.14	R-50	50	20/50	50
2477	Eastfields	806	10	27442.8	3040	0.11	R-50	50	20/50	50
2477	Eastfields	806	11	37461.6	1730	0.05	R-50	50	20/50	50
2477	Eastfields	806	11.01	50094	2654	0.05	R-50	50	20/50	50
2477	Eastfields	806	12	334715	0	0.00	R-50	50	20/50	50
2477	Eastfields	806	13	24088.68	3572	0.15	R-50	50	20/50	50
2477	Eastfields	806	14	22912.56	2799	0.12	R-50	50	20/50	50
2477	Eastfields	806	15	28314	3546	0.13	R-50	50	20/50	50
2477	Eastfields	806	16	28488.24	3524	0.12	R-50	50	20/50	50
2477	Eastfields	806	17	29925.72	3367	0.11	R-50	50	20/50	50
2477	Eastfields	806	18	31363.2	3849	0.12	R-50	50	20/50	50
2477	Eastfields	806	19	32887.8	3805	0.12	R-50	50	20/50	50
2625	Gateshead 1	651	6	57063.6	5095	0.09	R-50	50	35/50	50
2625	Gateshead 1	651	7	49222.8	4477	0.09	R-50	50	35/50	50
2625	Gateshead 1	651	8	50094	5236	0.10	R-50	50	35/50	50
2625	Gateshead 1	651	9	51836.4	4086	0.08	R-50	50	35/50	50
2625	Gateshead 1	651	10	41382	3565	0.09	R-50	50	35/50	50
2625	Gateshead 1	651	11	41382	4242	0.10	R-50	50	35/50	50
2625	Gateshead 1	651	12	41382	4387	0.11	R-50	50	35/50	50
2625	Gateshead 1	651	13	40075.2	4529	0.11	R-50	50	35/50	50
2625	Gateshead 1	651	14	49658.4	4535	0.09	R-50	50	35/50	50
2625	Gateshead 1	652	127	47916	4382	0.09	R-50	50	35/50	50
2625	Gateshead 1	652	128	43560	4129	0.09	R-50	50	35/50	50
2625	Gateshead 1	652	129	45738	4338	0.09	R-50	50	35/50	50
2625	Gateshead 1	652	130	62290.8	4531	0.07	R-50	50	35/50	50
2625	Gateshead 1	652	131	43995.6	4311	0.10	R-50	50	35/50	50
2625	Gateshead 1	652	132	43560	4789	0.11	R-50	50	35/50	50

File Map	Name	Block	Lot	Square Feet of Lot	2015 *Principal Building S.F. (not including accessory)	PRIOR F.A.R. (not including accessory)	Zone (2015)	File Map Front Yard	File Map Side Yard/Total	File Map Rear Yard
2625	Gateshead 1	652	333	43995.6	5860	0.13	R-50	50	35/50	50
2625	Gateshead 1	652	134	43995.6	5415	0.12	R-50	50	35/50	50
2625	Gateshead 1	652	135	43560	4116	0.09	R-50	50	35/50	50
2625	Gateshead 1	652	136	43560	5518	0.13	R-50	50	35/50	50
2625	Gateshead 1	652	137	43560	6104	0.14	R-50	50	35/50	50
2625	Gateshead 1	652	138	43560	4416	0.10	R-50	50	35/50	50
2625	Gateshead 1	652	139	43560	4728	0.11	R-50	50	35/50	50
2625	Gateshead 1	652	140	44866.8	4919	0.11	R-50	50	35/50	50
2625	Gateshead 1	652	141	68389.2	4521	0.07	R-50	50	35/50	50
2625	Gateshead 1	652	142	51836.4	4723	0.09	R-50	50	35/50	50
2625	Gateshead 1	652	143	49222.8	4783	0.10	R-50	50	35/50	50
2625	Gateshead 1	652	144	50094	4104	0.08	R-50	50	35/50	50
2625	Gateshead 1	652	145	59241.6	4311	0.07	R-50	50	35/50	50
3078	Gateshead 2	652	11	52272	3474	0.07	R-50	50	35/50	50
3078	Gateshead 2	652	12	48351.6	3511	0.07	R-50	50	35/50	50
3078	Gateshead 2	652	13	47044.8	3237	0.07	R-50	50	35/50	50
3078	Gateshead 2	652	14	50094	3368	0.07	R-50	50	35/50	50
3078	Gateshead 2	652	15	436209.8	0	0.00	R-50	50	35/50	50
3078	Gateshead 2	652	16	66211.2	3943	0.06	R-50	50	35/50	50
3078	Gateshead 2	652	17	57063.6	3568	0.06	R-50	50	35/50	50
3078	Gateshead 2	652	18	56192.4	3560	0.06	R-50	50	35/50	50
2711	Logan Farms 1	710	1	24306.48	2486	0.10	R-50	35	15/35	35
2711	Logan Farms 1	710	2	23304.6	2867	0.12	R-50	35	15/35	35
2711	Logan Farms 1	710	3	32757.12	2717	0.08	R-50	35	15/35	35
2711	Logan Farms 1	710	4	42906.6	3173	0.07	R-50	35	15/35	35
2711	Logan Farms 1	710	5	23043.24	2717	0.12	R-50	35	15/35	35
2711	Logan Farms 1	710	11	24437.16	2821	0.12	R-50	35	15/35	35
2711	Logan Farms 1	710	12	23827.32	3193	0.13	R-50	35	15/35	35
2711	Logan Farms 1	710	13	23827.32	2956	0.12	R-50	35	15/35	35
2711	Logan Farms 1	710	14	32147.28	3136	0.10	R-50	35	15/35	35

File Map	Name	Block	Lot	Square Feet of Lot	2015 *Principal Building S.F. (not including accessory)	PRIOR F.A.R. (not including accessory)	Zone (2015)	File Map Front Yard	File Map Side Yard/Total	File Map Rear Yard
2711	Logan Farms 1	710	15	31014.72	3640	0.12	R-50	35	15/35	35
2711	Logan Farms 1	710	16	21649.32	2815	0.13	R-50	35	15/35	35
2711	Logan Farms 1	710	17	20124.72	3127	0.16	R-50	35	15/35	35
2711	Logan Farms 1	707	107	24088.68	2871	0.12	R-50	35	15/35	35
2711	Logan Farms 1	707	108	20037.6	3325	0.17	R-50	35	15/35	35
2711	Logan Farms 1	707	109	19994.04	2516	0.13	R-50	35	15/35	35
2711	Logan Farms 1	707	110	20603.88	3751	0.18	R-50	35	15/35	35
2712	Logan Farms 2	707	83	23130.36	3268	0.14	R-50	35	15/35	35
2712	Logan Farms 2	707	84	21954.24	2988	0.14	R-50	35	15/35	35
2712	Logan Farms 2	707	85	23958	3493	0.15	R-50	35	15/35	35
2712	Logan Farms 2	707	86	45476.64	2560	0.06	R-50	35	15/35	35
2712	Logan Farms 2	707	87	27704.16	2560	0.09	R-50	35	15/35	35
2712	Logan Farms 2	707	88	20647.44	3011	0.15	R-50	35	15/35	35
2712	Logan Farms 2	707	89	21083.04	2903	0.14	R-50	35	15/35	35
2712	Logan Farms 2	707	90	20081.16	2895	0.14	R-50	35	15/35	35
2712	Logan Farms 2	707	91	22564.08	3042	0.13	R-50	35	15/35	35
2712	Logan Farms 2	707	92	24785.64	2988	0.12	R-50	35	15/35	35
2712	Logan Farms 2	707	93	25482.6	2911	0.11	R-50	35	15/35	35
2712	Logan Farms 2	707	94	21213.72	2985	0.14	R-50	35	15/35	35
2712	Logan Farms 2	707	95	20516.76	2923	0.14	R-50	35	15/35	35
2712	Logan Farms 2	707	96	20037.6	2925	0.15	R-50	35	15/35	35
2712	Logan Farms 2	707	96.97	20429.64	3318	0.16	R-50	35	15/35	35
2712	Logan Farms 2	707	98	21039.48	2916	0.14	R-50	35	15/35	35
2712	Logan Farms 2	707	99	20255.4	2900	0.14	R-50	35	15/35	35
2712	Logan Farms 2	707	100	20037.6	2871	0.14	R-50	35	15/35	35
2712	Logan Farms 2	707	101	21867.12	2890	0.13	R-50	35	15/35	35
2712	Logan Farms 2	707	102	20168.28	2911	0.14	R-50	35	15/35	35
2712	Logan Farms 2	707	103	20168.28	2849	0.14	R-50	35	15/35	35
2712	Logan Farms 2	707	104	20342.52	2935	0.14	R-50	35	15/35	35
2712	Logan Farms 2	707	105	19994.04	2988	0.15	R-50	35	15/35	35

File Map	Name	Block	Lot	Square Feet of Lot	2015 *Principal Building S.F. (not including accessory)	PRIOR F.A.R. (not including accessory)	Zone (2015)	File Map Front Yard	File Map Side Yard/Total	File Map Rear Yard
2712	Logan Farms 2	707	106	19994.04	3237	0.16	R-50	35	15/35	35
2778	Logan Farms 3	707	61	9713.88	2696	0.28	R-50	25	5/20'	25
2778	Logan Farms 3	707	62	7753.68	2854	0.37	R-50	25	5/20'	25
2778	Logan Farms 3	707	63	7753.68	2407	0.31	R-50	25	5/20'	25
2778	Logan Farms 3	707	64	7840.8	2882	0.37	R-50	25	5/20'	25
2778	Logan Farms 3	707	65	8015.04	2636	0.33	R-50	25	5/20'	25
2778	Logan Farms 3	707	66	8015.04	2676	0.33	R-50	25	5/20'	25
2778	Logan Farms 3	707	67	8015.04	2696	0.34	R-50	25	5/20'	25
2778	Logan Farms 3	707	68	8015.04	2716	0.34	R-50	25	5/20'	25
2778	Logan Farms 3	707	69	8015.04	2748	0.34	R-50	25	5/20'	25
2778	Logan Farms 3	707	70	8189.28	2716	0.33	R-50	25	5/20'	25
2778	Logan Farms 3	707	71	9583.2	2968	0.31	R-50	25	5/20'	25
2778	Logan Farms 3	707	72	9452.52	2676	0.28	R-50	25	5/20'	25
2778	Logan Farms 3	707	73	10018.8	2696	0.27	R-50	25	5/20'	25
2778	Logan Farms 3	707	74	10802.88	2676	0.25	R-50	25	5/20'	25
2778	Logan Farms 3	707	75	9713.88	2696	0.28	R-50	25	5/20'	25
2778	Logan Farms 3	707	76	9147.6	2676	0.29	R-50	25	5/20'	25
2778	Logan Farms 3	707	77	11282.04	2800	0.25	R-50	25	5/20'	25
2778	Logan Farms 3	707	78	9147.6	2844	0.31	R-50	25	5/20'	25
2778	Logan Farms 3	707	79	8015.04	2820	0.35	R-50	25	5/20'	25
2778	Logan Farms 3	707	80	7971.48	2716	0.34	R-50	25	5/20'	25
2778	Logan Farms 3	707	81	7884.36	2702	0.34	R-50	25	5/20'	25
2778	Logan Farms 3	707	82	8015.04	2449	0.31	R-50	25	5/20'	25
2713	Logan Farms 4	707	57	26310.24	3285	0.12	R-50	35	15/35	35
2713	Logan Farms 4	707	58	24742.08	2926	0.12	R-50	35	15/35	35
2713	Logan Farms 4	707	59	25656.84	3124	0.12	R-50	35	15/35	35
2713	Logan Farms 4	707	60	29185.2	2890	0.10	R-50	35	15/35	35
2713	Logan Farms 4	710	6	24567.84	3177	0.13	R-50	35	15/35	35
2713	Logan Farms 4	710	7	20516.76	2815	0.14	R-50	35	15/35	35
2713	Logan Farms 4	710	8	21213.72	2972	0.14	R-50	35	15/35	35

File Map	Name	Block	Lot	Square Feet of Lot	2015 *Principal Building S.F. (not including accessory)	PRIOR F.A.R. (not including accessory)	Zone (2015)	File Map Front Yard	File Map Side Yard/Total	File Map Rear Yard
2713	Logan Farms 4	710	9	27007.2	3105	0.11	R-50	35	15/35	35
2713	Logan Farms 4	710	10	27181.44	2890	0.11	R-50	35	15/35	35
2526	London Farms	805	9	41730.48	3835	0.09	R-50	50	15/50	50
2526	London Farms	805	10	84854.88	2990	0.04	R-50	50	15/50	50
2526	London Farms	805	11	30796.92	3722	0.12	R-50	50	15/50	50
2526	London Farms	805	12	33846.12	3344	0.10	R-50	50	15/50	50
2526	London Farms	805	13	60679.08	4272	0.07	R-50	50	15/50	50
2526	London Farms	805	14	61419.6	4852	0.08	R-50	50	15/50	50
2526	London Farms	805	15	60374.16	3096	0.05	R-50	50	15/50	50
2526	London Farms	805	16	48787.2	3968	0.08	R-50	50	15/50	50
2526	London Farms	805	17	48787.2	3822	0.08	R-50	50	15/50	50
2526	London Farms	805	18	37113.12	3307	0.09	R-50	50	15/50	50
2526	London Farms	805	19	35457.84	3636	0.10	R-50	50	15/50	50
2526	London Farms	806	64	0	0	0.00	R-50	50	15/50	50
2526	London Farms	806	65	28706.04	3570	0.12	R-50	50	15/50	50
2526	London Farms	806	66	26528.04	3092	0.12	R-50	50	15/50	50
2526	London Farms	806	67	24001.56	3626	0.15	R-50	50	15/50	50
2526	London Farms	806	68	24001.56	3572	0.15	R-50	50	15/50	50
2526	London Farms	806	69	22956.12	3748	0.16	R-50	50	15/50	50
2526	London Farms	806	70	22956.12	4002	0.17	R-50	50	15/50	50
2526	London Farms	806	71	24001.56	3232	0.13	R-50	50	15/50	50
2526	London Farms	806	72	24001.56	3798	0.16	R-50	50	15/50	50
2526	London Farms	806	73	29751.48	3256	0.11	R-50	50	15/50	50
2526	London Farms	806	74	29969.28	3729	0.12	R-50	50	15/50	50
2526	London Farms	806	75	44561.88	2919	0.07	R-50	50	15/50	50
2802	Mountaintop Estates 2/2	715	1	68999.04	2450	0.04	R-50	50	15/30	80
2802	Mountaintop Estates 2/2	715	2	44169.84	2578	0.06	R-50	50	15/30	80
2802	Mountaintop Estates 2/2	715	3	44431.2	2037	0.05	R-50	50	15/30	80
2802	Mountaintop Estates 2/2	715	4	44431.2	4447	0.10	R-50	50	15/30	80
2802	Mountaintop Estates 2/2	715	5	44300.52	2992	0.07	R-50	50	15/30	80

File Map	Name	Block	Lot	Square Feet of Lot	2015 *Principal Building S.F. (not including accessory)	PRIOR F.A.R. (not including accessory)	Zone (2015)	File Map Front Yard	File Map Side Yard/Total	File Map Rear Yard
2802	Mountaintop Estates 2/2	715	6	44300.52	2730	0.06	R-50	50	15/30	80
2802	Mountaintop Estates 2/2	715	7	44300.52	2456	0.06	R-50	50	15/30	80
2802	Mountaintop Estates 2/2	715	13	42122.52	3588	0.09	R-50	50	15/30	80
2802	Mountaintop Estates 2/2	715	14	25003.44	3861	0.15	R-50	50	15/30	80
2802	Mountaintop Estates 2/2	715	15	32060.16	3991	0.12	R-50	50	15/30	80
2802	Mountaintop Estates 2/2	715	16	37069.56	4764	0.13	R-50	50	15/30	80
2802	Mountaintop Estates 2/2	715	17	60330.6	4187	0.07	R-50	50	15/30	80
2802	Mountaintop Estates 2/2	715	18	77406.12	4157	0.05	R-50	50	15/30	80
2802	Mountaintop Estates 2/2	715	19	41948.28	4271	0.10	R-50	50	15/30	80
2586	Mountianview II	656	29	37505.16	4634	0.12	R-50	75	30 int./ 25 corner	80
2586	Mountianview II	656	29.O1	0	0	0.00	R-50	75	30 int./ 25 corner	80
2586	Mountianview II	656	30	37505.16	5280	0.14	R-50	75	30 int./ 25 corner	80
2586	Mountianview II	656	31	42383.88	4188	0.10	R-50	75	30 int./ 25 corner	80
2586	Mountianview II	656	32	44779.68	4480	0.10	R-50	75	30 int./ 25 corner	80
2586	Mountianview II	656	33	35240.04	5226	0.15	R-50	75	30 int./ 25 corner	80
2586	Mountianview II	656	34	35240.04	4210	0.12	R-50	75	30 int./ 25 corner	80
2586	Mountianview II	656	35	44474.76	4800	0.11	R-50	75	30 int./ 25 corner	80
2586	Mountianview II	656	36	64860.84	4392	0.07	R-50	75	30 int./ 25 corner	80
2586	Mountianview II	656	37	71264.16	5206	0.07	R-50	75	30 int./ 25 corner	80
2586	Mountianview II	656	38	76970.52	4498	0.06	R-50	75	30 int./ 25 corner	80
2586	Mountianview II	656	39	56584.44	4081	0.07	R-50	75	30 int./ 25 corner	80
2586	Mountianview II	656	40	105894.4	8797	0.08	R-50	75	30 int./ 25 corner	80
2586	Mountianview II	656	41	43211.52	4446	0.10	R-50	75	30 int./ 25 corner	80

File Map	Name	Block	Lot	Square Feet of Lot	2015 *Principal Building S.F. (not including accessory)	PRIOR F.A.R. (not including accessory)	Zone (2015)	File Map Front Yard	File Map Side Yard/Total	File Map Rear Yard
2586	Mountianview II	656	42	54798.48	4888	0.09	R-50	75	30 int./ 25 corner	80
2586	Mountianview II	656	43	35457.84	4650	0.13	R-50	75	30 int./ 25 corner	80
2586	Mountianview II	656	44	35283.6	3834	0.11	R-50	75	30 int./ 25 corner	80
2586	Mountianview II	656	45	35240.04	4466	0.13	R-50	75	30 int./ 25 corner	80
2586	Mountianview II	656	46	35240.04	4622	0.13	R-50	75	30 int./ 25 corner	80
2586	Mountianview II	656	47	35240.04	3710	0.11	R-50	75	30 int./ 25 corner	80
2586	Mountianview II	656	48	44692.56	4852	0.11	R-50	75	30 int./ 25 corner	80
2596	Running Brook 1	652	100	20473.2	5076	0.25	R-50	not on map	not on map	not on map
2596	Running Brook 1	652	101	20473.2	5336	0.26	R-50	not on map	not on map	not on map
2596	Running Brook 1	652	102	20473.2	4359	0.21	R-50	not on map	not on map	not on map
2596	Running Brook 1	652	103	20473.2	3836	0.19	R-50	not on map	not on map	not on map
2596	Running Brook 1	652	104	20473.2	3980	0.19	R-50	not on map	not on map	not on map
2596	Running Brook 1	652	105	22651.2	5007	0.22	R-50	not on map	not on map	not on map
2596	Running Brook 1	652	106	0	0	0.00	R-50	not on map	not on map	not on map
2596	Running Brook 1	652	107	12.53	0	0.00	R-50	not on map	not on map	not on map
2596	Running Brook 1	652	108	20908.8	5192	0.25	R-50	not on map	not on map	not on map
2596	Running Brook 1	652	109	20473.2	4238	0.21	R-50	not on map	not on map	not on map
2596	Running Brook 1	652	110	20908.8	5140	0.25	R-50	not on map	not on map	not on map
2596	Running Brook 1	652	111	20908.8	5285	0.25	R-50	not on map	not on map	not on map
2596	Running Brook 1	652	112	20473.2	4168	0.20	R-50	not on map	not on map	not on map
2596	Running Brook 1	652	113	20473.2	5252	0.26	R-50	not on map	not on map	not on map
2596	Running Brook 1	652	114	20908.8	3216	0.15	R-50	not on map	not on map	not on map
2596	Running Brook 1	652	115	20473.2	4059	0.20	R-50	not on map	not on map	not on map
2596	Running Brook 1	652	116	0	0	0.00	R-50	Homeowners' Association		
2596	Running Brook 1	652	117	20473.2	4049	0.20	R-50	not on map	not on map	not on map
2596	Running Brook 1	652	118	20473.2	5234	0.26	R-50	not on map	not on map	not on map
2596	Running Brook 1	652	119	20473.2	3813	0.19	R-50	not on map	not on map	not on map
2596	Running Brook 1	652	120	20473.2	4626	0.23	R-50	not on map	not on map	not on map

File Map	Name	Block	Lot	Square Feet of Lot	2015 *Principal Building S.F. (not including accessory)	PRIOR F.A.R. (not including accessory)	Zone (2015)	File Map Front Yard	File Map Side Yard/Total	File Map Rear Yard
2596	Running Brook 1	652	121	20473.2	3868	0.19	R-50	not on map	not on map	not on map
2596	Running Brook 1	652	122	22651.2	5349	0.24	R-50	not on map	not on map	not on map
2596	Running Brook 1	652	123	20908.8	5057	0.24	R-50	not on map	not on map	not on map
2596	Running Brook 1	652	124	22215.6	4723	0.21	R-50	not on map	not on map	not on map
2596	Running Brook 1	652	125	0	0	0.00	R-50	Homeowners' Association		
2596	Running Brook 1	652	126	32670	1876	0.06	R-50	not on map	not on map	not on map
2596	Running Brook 1	653	3	20473.2	5292	0.26	R-50	not on map	not on map	not on map
2596	Running Brook 1	653	4	20908.8	6856	0.33	R-50	not on map	not on map	not on map
2596	Running Brook 1	653	5	20908.8	4488	0.21	R-50	not on map	not on map	not on map
2596	Running Brook 1	653	6	20473.2	4361	0.21	R-50	not on map	not on map	not on map
2596	Running Brook 1	653	7	20473.2	4106	0.20	R-50	not on map	not on map	not on map
2596	Running Brook 1	653	8	20473.2	4865	0.24	R-50	not on map	not on map	not on map
2596	Running Brook 1	653	9	0	0	0.00	R-50	Homeowners' Association		
2842	Running Brook 2	653	10	20473.2	4634	0.23	R-50	not on map	not on map	not on map
2842	Running Brook 2	653	11	20473.2	5016	0.25	R-50	not on map	not on map	not on map
2842	Running Brook 2	653	12	20473.2	4618	0.23	R-50	not on map	not on map	not on map
2842	Running Brook 2	653	13	20473.2	4646	0.23	R-50	not on map	not on map	not on map
2842	Running Brook 2	653	14	20908.8	7362	0.35	R-50	not on map	not on map	not on map
2842	Running Brook 2	653	15	20908.8	4811	0.23	R-50	not on map	not on map	not on map
2842	Running Brook 2	653	16	20908.8	4989	0.24	R-50	not on map	not on map	not on map
2842	Running Brook 2	653	17	20473.2	4803	0.23	R-50	not on map	not on map	not on map
2842	Running Brook 2	656	3	20473.2	4677	0.23	R-50	not on map	not on map	not on map
2842	Running Brook 2	656	4	20473.2	4811	0.23	R-50	not on map	not on map	not on map
2842	Running Brook 2	656	5	20908.8	4134	0.20	R-50	not on map	not on map	not on map
2842	Running Brook 2	656	6	20908.8	4768	0.23	R-50	not on map	not on map	not on map
2842	Running Brook 2	656	7	20473.2	4745	0.23	R-50	not on map	not on map	not on map
2842	Running Brook 2	656	8	20908.8	4948	0.24	R-50	not on map	not on map	not on map
2842	Running Brook 2	656	9	0	0	0.00	R-50	Homeowners' Association		
2842	Running Brook 2	656	10	20473.2	4691	0.23	R-50	not on map	not on map	not on map
2842	Running Brook 2	656	11	20473.2	4560	0.22	R-50	not on map	not on map	not on map

File Map	Name	Block	Lot	Square Feet of Lot	2015 *Principal Building S.F. (not including accessory)	PRIOR F.A.R. (not including accessory)	Zone (2015)	File Map Front Yard	File Map Side Yard/Total	File Map Rear Yard
2842	Running Brook 2	656	12	20473.2	5070	0.25	R-50	not on map	not on map	not on map
2842	Running Brook 2	656	13	20473.2	4945	0.24	R-50	not on map	not on map	not on map
2842	Running Brook 2	656	14	20473.2	4929	0.24	R-50	not on map	not on map	not on map
2842	Running Brook 2	656	15	0	0	0.00	R-50	not on map	not on map	not on map
2842	Running Brook 2	656	16	20473.2	4472	0.22	R-50	not on map	not on map	not on map
2842	Running Brook 2	656	17	20473.2	5206	0.25	R-50	not on map	not on map	not on map
2842	Running Brook 2	656	18	20473.2	4730	0.23	R-50	not on map	not on map	not on map
2842	Running Brook 2	656	19	20908.8	4090	0.20	R-50	not on map	not on map	not on map
2842	Running Brook 2	656	20	20908.8	4326	0.21	R-50	not on map	not on map	not on map
2842	Running Brook 2	656	21	20908.8	4201	0.20	R-50	not on map	not on map	not on map
2842	Running Brook 2	656	22	20473.2	4710	0.23	R-50	not on map	not on map	not on map
2842	Running Brook 2	656	23	0	0	0.00	R-50	Homeowners' Association		
2843	Running Brook 3	652	84	6.68	0	0.00	R-50	Homeowners' Association		
2843	Running Brook 3	652	85	20473.2	4660	0.23	R-50	not on map	not on map	not on map
2843	Running Brook 3	652	86	20908.8	4347	0.21	R-50	not on map	not on map	not on map
2843	Running Brook 3	652	87	20473.2	5421	0.26	R-50	not on map	not on map	not on map
2843	Running Brook 3	652	88	20473.2	4008	0.20	R-50	not on map	not on map	not on map
2843	Running Brook 3	652	89	20473.2	4580	0.22	R-50	not on map	not on map	not on map
2843	Running Brook 3	652	90	20908.8	4841	0.23	R-50	not on map	not on map	not on map
2843	Running Brook 3	652	91	20473.2	4347	0.21	R-50	not on map	not on map	not on map
2843	Running Brook 3	652	92	0	0	0.00	R-50	Homeowners' Association		
2843	Running Brook 3	652	93	20473.2	3992	0.19	R-50	not on map	not on map	not on map
2843	Running Brook 3	652	94	20473.2	4782	0.23	R-50	not on map	not on map	not on map
2843	Running Brook 3	652	95	20908.8	5157	0.25	R-50	not on map	not on map	not on map
2843	Running Brook 3	652	96	20473.2	4798	0.23	R-50	not on map	not on map	not on map
2843	Running Brook 3	652	97	20473.2	4814	0.24	R-50	not on map	not on map	not on map
2843	Running Brook 3	652	98	20908.8	5052	0.24	R-50	not on map	not on map	not on map
2843	Running Brook 3	652	99	0	0	0.00	R-50	Homeowners' Association		
2843	Running Brook 3	656	24	20473.2	3677	0.18	R-50	not on map	not on map	not on map
2843	Running Brook 3	656	25	20473.2	4220	0.21	R-50	not on map	not on map	not on map

File Map	Name	Block	Lot	Square Feet of Lot	2015 *Principal Building S.F. (not including accessory)	PRIOR F.A.R. (not including accessory)	Zone (2015)	File Map Front Yard	File Map Side Yard/Total	File Map Rear Yard
2843	Running Brook 3	656	26	20473.2	4846	0.24	R-50	not on map	not on map	not on map
2843	Running Brook 3	656	27	23958	4190	0.17	R-50	not on map	not on map	not on map
2541	Stoney Hill Bridgewater	721	64	830689.2	0	0.00	R-50	40	15/35	40
2541	Stoney Hill Bridgewater	721	65	35719.2	3865	0.11	R-50	40	15/35	40
2541	Stoney Hill Bridgewater	721	66	28749.6	3102	0.11	R-50	40	15/35	40
2541	Stoney Hill Bridgewater	721	67	27442.8	4093	0.15	R-50	40	15/35	40
2541	Stoney Hill Bridgewater	721	68	25700.4	3400	0.13	R-50	40	15/35	40
2541	Stoney Hill Bridgewater	721	69	25264.8	3567	0.14	R-50	40	15/35	40
2541	Stoney Hill Bridgewater	721	70	27007.2	4121	0.15	R-50	40	15/35	40
2541	Stoney Hill Bridgewater	721	71	33976.8	3858	0.11	R-50	40	15/35	40
2541	Stoney Hill Bridgewater	721	72	36590.4	4062	0.11	R-50	40	15/35	40
2541	Stoney Hill Bridgewater	721	73	25700.4	4218	0.16	R-50	40	15/35	40
2541	Stoney Hill Bridgewater	721	74	26136	3070	0.12	R-50	40	15/35	40
2541	Stoney Hill Bridgewater	721	75	33541.2	4294	0.13	R-50	40	15/35	40
2541	Stoney Hill Bridgewater	716	23	208216.8	0	0.00	R-50	40	15/35	40
2541	Stoney Hill Bridgewater	716	24	28314	3486	0.12	R-50	40	15/35	40
2541	Stoney Hill Bridgewater	716	25	35283.6	4146	0.12	R-50	40	15/35	40
2541	Stoney Hill Bridgewater	716	26	31798.8	3591	0.11	R-50	40	15/35	40
2541	Stoney Hill Bridgewater	716	27	27878.4	3487	0.13	R-50	40	15/35	40
2541	Stoney Hill Bridgewater	716	28	26571.6	4237	0.16	R-50	40	15/35	40
2541	Stoney Hill Bridgewater	716	29	25264.8	3390	0.13	R-50	40	15/35	40
2541	Stoney Hill Bridgewater	716	30	28749.6	3988	0.14	R-50	40	15/35	40
2541	Stoney Hill Bridgewater	716	31	25264.8	3494	0.14	R-50	40	15/35	40
2541	Stoney Hill Bridgewater	716	32	24829.2	3740	0.15	R-50	40	15/35	40
2541	Stoney Hill Bridgewater	716	33	26571.6	4120	0.16	R-50	40	15/35	40
2541	Stoney Hill Bridgewater	716	34	35719.2	4504	0.13	R-50	40	15/35	40
2541	Stoney Hill Bridgewater	716	35	37026	2897	0.08	R-50	40	15/35	40
2541	Stoney Hill Bridgewater	716	36	33105.6	3822	0.12	R-50	40	15/35	40
2541	Stoney Hill Bridgewater	716	37	32670	5197	0.16	R-50	40	15/35	40
2753	Stoney Hill Middlebrook	721	76	30492	3543	0.12	R-50	40	15/35	40

File Map	Name	Block	Lot	Square Feet of Lot	2015 *Principal Building S.F. (not including accessory)	PRIOR F.A.R. (not including accessory)	Zone (2015)	File Map Front Yard	File Map Side Yard/Total	File Map Rear Yard
2753	Stoney Hill Middlebrook	721	77	31363.2	3848	0.12	R-50	40	15/35	40
2753	Stoney Hill Middlebrook	721	78	29185.2	4013	0.14	R-50	40	15/35	40
2753	Stoney Hill Middlebrook	721	79	28314	4238	0.15	R-50	40	15/35	40
2753	Stoney Hill Middlebrook	721	80	23522.4	4089	0.17	R-50	40	15/35	40
2753	Stoney Hill Middlebrook	721	81	27007.2	3560	0.13	R-50	40	15/35	40
2753	Stoney Hill Middlebrook	721	82	25264.8	4860	0.19	R-50	40	15/35	40
2753	Stoney Hill Middlebrook	721	83	32670	4281	0.13	R-50	40	15/35	40
2753	Stoney Hill Middlebrook	721	84	37897.2	3362	0.09	R-50	40	15/35	40
2753	Stoney Hill Middlebrook	721	85	31798.8	3661	0.12	R-50	40	15/35	40
2753	Stoney Hill Middlebrook	721	86	30927.6	3962	0.13	R-50	40	15/35	40
2753	Stoney Hill Middlebrook	721	87	27442.8	3592	0.13	R-50	40	15/35	40
2753	Stoney Hill Middlebrook	721	88	27442.8	3602	0.13	R-50	40	15/35	40
2753	Stoney Hill Middlebrook	721	89	25264.8	3946	0.16	R-50	40	15/35	40
2753	Stoney Hill Middlebrook	721	90	22651.2	4182	0.18	R-50	40	15/35	40
2822	Stoney Hill Middlebrook II	716	38	29620.8	3706	0.13	R-50	40	15/35	40
2822	Stoney Hill Middlebrook II	716	39	26571.6	3399	0.13	R-50	40	15/35	40
2822	Stoney Hill Middlebrook II	716	40	30056.4	3389	0.11	R-50	40	15/35	40
2822	Stoney Hill Middlebrook II	716	41	33541.2	4058	0.12	R-50	40	15/35	40
2822	Stoney Hill Middlebrook II	716	42	27007.2	5955	0.22	R-50	40	15/35	40
2822	Stoney Hill Middlebrook II	716	43	32234.4	4458	0.14	R-50	40	15/35	40
2822	Stoney Hill Middlebrook II	716	44	27878.4	3308	0.12	R-50	40	15/35	40
2822	Stoney Hill Middlebrook II	716	45	26136	3658	0.14	R-50	40	15/35	40
2822	Stoney Hill Middlebrook II	716	46	27878.4	4037	0.14	R-50	40	15/35	40
2822	Stoney Hill Middlebrook II	716	47	27442.8	4706	0.17	R-50	40	15/35	40
2822	Stoney Hill Middlebrook II	716	48	30056.4	3908	0.13	R-50	40	15/35	40
2822	Stoney Hill Middlebrook II	716	49	25264.8	4271	0.17	R-50	40	15/35	40
2822	Stoney Hill Middlebrook II	721	91	23958	4071	0.17	R-50	40	15/35	40
2822	Stoney Hill Middlebrook II	721	92	28314	4629	0.16	R-50	40	15/35	40
2822	Stoney Hill Middlebrook II	721	93	25264.8	5123	0.20	R-50	40	15/35	40
2822	Stoney Hill Middlebrook II	721	94	23086.8	4236	0.18	R-50	40	15/35	40

File Map	Name	Block	Lot	Square Feet of Lot	2015 *Principal Building S.F. (not including accessory)	PRIOR F.A.R. (not including accessory)	Zone (2015)	File Map Front Yard	File Map Side Yard/Total	File Map Rear Yard
2822	Stoney Hill Middlebrook II	721	95	22215.6	3405	0.15	R-50	40	15/35	40
2822	Stoney Hill Middlebrook II	721	96	31798.8	4060	0.13	R-50	40	15/35	40
2822	Stoney Hill Middlebrook II	721	97	31798.8	3566	0.11	R-50	40	15/35	40
2822	Stoney Hill Middlebrook II	721	98	29185.2	4150	0.14	R-50	40	15/35	40
2822	Stoney Hill Middlebrook II	721	99	32234.4	5055	0.16	R-50	40	15/35	40
2822	Stoney Hill Middlebrook II	721	100	29620.8	4619	0.16	R-50	40	15/35	40
2828	Stoney Hill Middlebrook III	716	1	33541.2	3924	0.12	R-50	40	15/35	40
2828	Stoney Hill Middlebrook III	716	50	29185.2	5159	0.18	R-50	40	15/35	40
2828	Stoney Hill Middlebrook III	722	1	35719.2	5075	0.14	R-50	40	15/35	40
2828	Stoney Hill Middlebrook III	722	2	31363.2	3630	0.12	R-50	40	15/35	40
2828	Stoney Hill Middlebrook III	722	3	50006.88	3386	0.07	R-50	40	15/35	40
2828	Stoney Hill Middlebrook III	722	4	45738	3062	0.07	R-50	40	15/35	40
2828	Stoney Hill Middlebrook III	722	5	50094	2180	0.04	R-50	40	15/35	40
2828	Stoney Hill Middlebrook III	721	101	30492	3306	0.11	R-50	40	15/35	40
2828	Stoney Hill Middlebrook III	721	102	29620.8	4039	0.14	R-50	40	15/35	40
2828	Stoney Hill Middlebrook III	721	103	29620.8	5031	0.17	R-50	40	15/35	40
2828	Stoney Hill Middlebrook III	721	104	24829.2	4081	0.16	R-50	40	15/35	40
2828	Stoney Hill Middlebrook III	721	105	26136	4078	0.16	R-50	40	15/35	40
2828	Stoney Hill Middlebrook III	721	106	27442.8	3811	0.14	R-50	40	15/35	40
2828	Stoney Hill Middlebrook III	721	107	28314	4795	0.17	R-50	40	15/35	40
2828	Stoney Hill Middlebrook III	721	108	27442.8	4137	0.15	R-50	40	15/35	40
2828	Stoney Hill Middlebrook III	721	109	27442.8	3994	0.15	R-50	40	15/35	40
2828	Stoney Hill Middlebrook III	721	110	31798.8	3486	0.11	R-50	40	15/35	40
2828	Stoney Hill Middlebrook III	721	111	27137.88	3640	0.13	R-50	40	15/35	40
2828	Stoney Hill Middlebrook III	721	112	37897.2	3509	0.09	R-50	40	15/35	40
2828	Stoney Hill Middlebrook III	721	113	1583754	0	0.00	R-50	40	15/35	40
2898	Stoney Hill Middlebrook IV	722	24	32234.4	4230	0.13	R-50	40	15/35	40
2898	Stoney Hill Middlebrook IV	722	25	23958	4015	0.17	R-50	40	15/35	40
2898	Stoney Hill Middlebrook IV	722	26	30056.4	5081	0.17	R-50	40	15/35	40
2898	Stoney Hill Middlebrook IV	722	27.01	94089.6	6206	0.07	R-50	40	15/35	40

File Map	Name	Block	Lot	Square Feet of Lot	2015 *Principal Building S.F. (not including accessory)	PRIOR F.A.R. (not including accessory)	Zone (2015)	File Map Front Yard	File Map Side Yard/Total	File Map Rear Yard
2898	Stoney Hill Middlebrook IV	722	28	40075.2	4070	0.10	R-50	40	15/35	40
2898	Stoney Hill Middlebrook IV	722	29	26136	4007	0.15	R-50	40	15/35	40
2898	Stoney Hill Middlebrook IV	722	30	29620.8	4049	0.14	R-50	40	15/35	40
2898	Stoney Hill Middlebrook IV	722	31	30492	3903	0.13	R-50	40	15/35	40
2898	Stoney Hill Middlebrook IV	722	32	27878.4	3989	0.14	R-50	40	15/35	40
2898	Stoney Hill Middlebrook IV	722	33	34848	3428	0.10	R-50	40	15/35	40
2898	Stoney Hill Middlebrook IV	716	2	29620.8	3380	0.11	R-50	40	15/35	40
2898	Stoney Hill Middlebrook IV	716	3	28314	3735	0.13	R-50	40	15/35	40
2898	Stoney Hill Middlebrook IV	716	4	30927.6	4510	0.15	R-50	40	15/35	40
2898	Stoney Hill Middlebrook IV	716	5	28314	4155	0.15	R-50	40	15/35	40
2898	Stoney Hill Middlebrook IV	716	6	37461.6	5537	0.15	R-50	40	15/35	40
1961	Van Holten Estates 1	426.02	13	30056.4	2920	0.10	R-40	40	not on map	not on map
1961	Van Holten Estates 1	426.02	14	26136	2902	0.11	R-40	40	not on map	not on map
1961	Van Holten Estates 1	426.02	15	26136	2728	0.10	R-40	40	not on map	not on map
1961	Van Holten Estates 1	426.02	16	26136	2944	0.11	R-40	40	not on map	not on map
1961	Van Holten Estates 1	426.02	17	30927.6	2263	0.07	R-40	40	not on map	not on map
1961	Van Holten Estates 1	426.02	18	795405.6	0	0.00	R-40	40	not on map	not on map
1961	Van Holten Estates 1	426.02	19	29620.8	2848	0.10	R-40	40	not on map	not on map
1961	Van Holten Estates 1	426.02	20	27878.4	2920	0.10	R-40	40	not on map	not on map
1961	Van Holten Estates 1	426.02	21	29620.8	2530	0.09	R-40	40	not on map	not on map
1961	Van Holten Estates 1	426.02	22	29185.2	2806	0.10	R-40	40	not on map	not on map
1961	Van Holten Estates 1	426.02	23	33541.2	3140	0.09	R-40	40	not on map	not on map
1961	Van Holten Estates 1	426.01	22	34412.4	2788	0.08	R-40	40	not on map	not on map
1961	Van Holten Estates 1	426.01	23	33976.8	2728	0.08	R-40	40	not on map	not on map
1961	Van Holten Estates 1	426.01	24	34412.4	2826	0.08	R-40	40	not on map	not on map
1961	Van Holten Estates 1	426.01	25	34412.4	2728	0.08	R-40	40	not on map	not on map
1961	Van Holten Estates 1	426.01	26	34412.4	3174	0.09	R-40	40	not on map	not on map
1961	Van Holten Estates 1	426.01	27	34848	2920	0.08	R-40	40	not on map	not on map
1961	Van Holten Estates 1	426.01	28	33976.8	2904	0.09	R-40	40	not on map	not on map
1961	Van Holten Estates 1 South	418	7	564973.2	0	0.00	Open Space Lot only-but 2 file map sheets			
2033	Van Holten Estates 2	418	11	31711.68	2404	0.08	R-40	40	not on map	not on map

File Map	Name	Block	Lot	Square Feet of Lot	2015 *Principal Building S.F. (not including accessory)	PRIOR F.A.R. (not including accessory)	Zone (2015)	File Map Front Yard	File Map Side Yard/Total	File Map Rear Yard
2033	Van Holten Estates 2	418	12	31188.96	2316	0.07	R-40	40	not on map	not on map
2033	Van Holten Estates 2	418	13	40989.96	2039	0.05	R-40	40	not on map	not on map
2033	Van Holten Estates 2	418	14	35893.44	2033	0.06	R-40	40	not on map	not on map
2033	Van Holten Estates 2	418	15	46565.64	2321	0.05	R-40	40	not on map	not on map
2033	Van Holten Estates 2	418	16	36982.44	1572	0.04	R-40	40	not on map	not on map
2033	Van Holten Estates 2	418	29	27442.8	2452	0.09	R-40	40	not on map	not on map
2033	Van Holten Estates 2	418	30	26136	2228	0.09	R-40	40	not on map	not on map
2033	Van Holten Estates 2	418	31	25700.4	2456	0.10	R-40	40	not on map	not on map
2033	Van Holten Estates 2	418	32	25264.8	2348	0.09	R-40	40	not on map	not on map
2033	Van Holten Estates 2	418	33	25264.8	2406	0.10	R-40	40	not on map	not on map
2033	Van Holten Estates 2	418	34	27878.4	2428	0.09	R-40	40	not on map	not on map
2033	Van Holten Estates 2	418	35	27442.8	2576	0.09	R-40	40	not on map	not on map
2033	Van Holten Estates 2	418	36	28314	2512	0.09	R-40	40	not on map	not on map
2033	Van Holten Estates 2	418	37	23958	2712	0.11	R-40	40	not on map	not on map
2066	Van Holten Estates 2 North	428	8	45302.4	3555	0.08	R-40	40	not on map	not on map
2066	Van Holten Estates 2 North	428	9	47044.8	4256	0.09	R-40	40	not on map	not on map
2066	Van Holten Estates 2 North	427	2	25700.4	2144	0.08	R-40	40	not on map	not on map
2066	Van Holten Estates 2 North	427	3	26136	2846	0.11	R-40	40	not on map	not on map
2066	Van Holten Estates 2 North	427	4	26136	3162	0.12	R-40	40	not on map	not on map
2066	Van Holten Estates 2 North	427	5	28314	3079	0.11	R-40	40	not on map	not on map
2066	Van Holten Estates 2 North	427	6	38768.4	2776	0.07	R-40	40	not on map	not on map
2066	Van Holten Estates 2 North	427	7	34848	3401	0.10	R-40	40	not on map	not on map
2066	Van Holten Estates 2 North	427	8	23958	3136	0.13	R-40	40	not on map	not on map
2066	Van Holten Estates 2 North	427	9	27878.4	2794	0.10	R-40	40	not on map	not on map
2066	Van Holten Estates 2 North	427	10	32234.4	3178	0.10	R-40	40	not on map	not on map
2066	Van Holten Estates 2 North	426.02	1	28749.6	2876	0.10	R-40	40	not on map	not on map
2066	Van Holten Estates 2 North	426.02	2	23958	2128	0.09	R-40	40	not on map	not on map
2066	Van Holten Estates 2 North	426.02	3	24393.6	3128	0.13	R-40	40	not on map	not on map
2066	Van Holten Estates 2 North	426.02	4	23958	2172	0.09	R-40	40	not on map	not on map
2066	Van Holten Estates 2 North	426.02	5	26571.6	3125	0.12	R-40	40	not on map	not on map
2066	Van Holten Estates 2 North	426.02	6	27442.8	3513	0.13	R-40	40	not on map	not on map

File Map	Name	Block	Lot	Square Feet of Lot	2015 *Principal Building S.F. (not including accessory)	PRIOR F.A.R. (not including accessory)	Zone (2015)	File Map Front Yard	File Map Side Yard/Total	File Map Rear Yard
2066	Van Holten Estates 2 North	426.02	7	27442.8	3482	0.13	R-40	40	not on map	not on map
2066	Van Holten Estates 2 North	426.02	8	27007.2	3913	0.14	R-40	40	not on map	not on map
2066	Van Holten Estates 2 North	426.02	9	26136	2858	0.11	R-40	40	not on map	not on map
2066	Van Holten Estates 2 North	426.02	10	26136	3547	0.14	R-40	40	not on map	not on map
2066	Van Holten Estates 2 North	426.02	11	26136	2279	0.09	R-40	40	not on map	not on map
2066	Van Holten Estates 2 North	426.02	12	30492	2780	0.09	R-40	40	not on map	not on map
2599	Washington Cedars	649	14	26571.6	3554	0.13	R-50	50	20/30	40
2599	Washington Cedars	649	15	28314	3853	0.14	R-50	50	20/30	40
2599	Washington Cedars	649	16	28749.6	3765	0.13	R-50	50	20/30	40
2599	Washington Cedars	649	17	27442.8	3979	0.14	R-50	50	20/30	40
2599	Washington Cedars	649	18	27007.2	3686	0.14	R-50	50	20/30	40
2599	Washington Cedars	649	19	26571.6	3656	0.14	R-50	50	20/30	40
2599	Washington Cedars	649	20	38332.8	3206	0.08	R-50	50	20/30	40
2599	Washington Cedars	649	21	551034	0	0.00	R-50	50	20/30	40
2599	Washington Cedars	649	22	30056.4	3912	0.13	R-50	50	20/30	40
2599	Washington Cedars	649	23	34848	3462	0.10	R-50	50	20/30	40
2599	Washington Cedars	649	24	31798.8	3154	0.10	R-50	50	20/30	40
2599	Washington Cedars	649	25	32234.4	3337	0.10	R-50	50	20/30	40
2599	Washington Cedars	649	26	31363.2	4057	0.13	R-50	50	20/30	40
2599	Washington Cedars	649	27	29620.8	3204	0.11	R-50	50	20/30	40
2599	Washington Cedars	649	28	29185.2	3371	0.12	R-50	50	20/30	40
2599	Washington Cedars	649	29	27878.4	4128	0.15	R-50	50	20/30	40
2599	Washington Cedars	649	40	29185.2	3955	0.14	R-50	50	20/30	40
2599	Washington Cedars	649	41	26571.6	3248	0.12	R-50	50	20/30	40
2599	Washington Cedars	650	3	50094	4096	0.08	R-50	50	20/30	40
2599	Washington Cedars	650	4	50529.6	3891	0.08	R-50	50	20/30	40
2602	Washington Pass	650	1	50050.44	3063	0.06	R-50	75	35/60	85
2602	Washington Pass	650	5	60112.8	4323	0.07	R-50	75	35/60	85
2602	Washington Pass	650	6	59241.6	2940	0.05	R-50	75	35/60	85
2602	Washington Pass	650	7	50573.16	5941	0.12	R-50	75	35/60	85
2602	Washington Pass	650	8	70175.16	3785	0.05	R-50	75	35/60	85

File Map	Name	Block	Lot	Square Feet of Lot	2015 *Principal Building S.F. (not including accessory)	PRIOR F.A.R. (not including accessory)	Zone (2015)	File Map Front Yard	File Map Side Yard/Total	File Map Rear Yard
2602	Washington Pass	650	9	55234.08	3766	0.07	R-50	75	35/60	85
2602	Washington Pass	649	1	54885.6	3857	0.07	R-50	75	35/60	85
2602	Washington Pass	649	2	50529.6	3834	0.08	R-50	75	35/60	85
2602	Washington Pass	649	3	50094	4096	0.08	R-50	75	35/60	85
2602	Washington Pass	649	4	50529.6	3891	0.08	R-50	75	35/60	85
2602	Washington Pass	649	5	50529.6	3769	0.07	R-50	75	35/60	85
2602	Washington Pass	649	6	50094	3123	0.06	R-50	75	35/60	85
2602	Washington Pass	649	7	50965.2	3716	0.07	R-50	75	35/60	85
2602	Washington Pass	649	8	122839.2	0	0.00	R-50	75	35/60	85
2602	Washington Pass	649	9	52272	3738	0.07	R-50	75	35/60	85
2602	Washington Pass	649	10	53143.2	3716	0.07	R-50	75	35/60	85
2602	Washington Pass	649	11	51836.4	3000	0.06	R-50	75	35/60	85
2602	Washington Pass	649	12	50529.6	3497	0.07	R-50	75	35/60	85
2602	Washington Pass	649	13	59241.6	4652	0.08	R-50	75	35/60	85
2602	Washington Pass	649	82	54885.6	2260	0.04	R-50	75	35/60	85
2602	Washington Pass	649	83	50094	4289	0.09	R-50	75	35/60	85
2602	Washington Pass	649	84	50094	3844	0.08	R-50	75	35/60	85
2602	Washington Pass	649	85	50529.6	3991	0.08	R-50	75	35/60	85
2602	Washington Pass	649	86	50965.2	3941	0.08	R-50	75	35/60	85
2628	Wexford Chase	802	98	35283.6	3535	0.10	R-50	40	15/35	40
2628	Wexford Chase	802	99	46609.2	5004	0.11	R-50	40	15/35	40
2628	Wexford Chase	802	100	32670	2844	0.09	R-50	40	15/35	40
2628	Wexford Chase	802	101	31319.64	2911	0.09	R-50	40	15/35	40
2628	Wexford Chase	802	102	32713.56	3506	0.11	R-50	40	15/35	40
2628	Wexford Chase	802	103	41207.76	3123	0.08	R-50	40	15/35	40
2628	Wexford Chase	802	104	39334.68	3244	0.08	R-50	40	15/35	40
2628	Wexford Chase	802	105	32452.2	3386	0.10	R-50	40	15/35	40
2628	Wexford Chase	802	106	36503.28	3502	0.10	R-50	40	15/35	40
2628	Wexford Chase	802	107	33062.04	3169	0.10	R-50	40	15/35	40
2628	Wexford Chase	802	108	28226.88	2840	0.10	R-50	40	15/35	40
2628	Wexford Chase	802	109	29185.2	3200	0.11	R-50	40	15/35	40

File Map	Name	Block	Lot	Square Feet of Lot	2015 *Principal Building S.F. (not including accessory)	PRIOR F.A.R. (not including accessory)	Zone (2015)	File Map Front Yard	File Map Side Yard/Total	File Map Rear Yard
2628	Wexford Chase	802	110	37940.76	2832	0.07	R-50	40	15/35	40
2628	Wexford Chase	802	111	39770.28	3040	0.08	R-50	40	15/35	40
2628	Wexford Chase	802	112	41251.32	2853	0.07	R-50	40	15/35	40
2628	Wexford Chase	802	113	35457.84	3349	0.09	R-50	40	15/35	40
2628	Wexford Chase	802	114	485737.6	0	0.00	R-50	40	15/35	40
2628	Wexford Chase	802	115	37897.2	4259	0.11	R-50	40	15/35	40
2628	Wexford Chase	802	116	55756.8	3639	0.07	R-50	40	15/35	40
2628	Wexford Chase	802	117	39204	3340	0.09	R-50	40	15/35	40
736	Wolf Hill Section 1	907.01	1	47208	4724	0.10	R-50	50	20/60	75
736	Wolf Hill Section 1	907.01	2	49719	5074	0.10	R-50	50	20/60	75
736	Wolf Hill Section 1	907.01	21	39671	4651	0.12	R-50	50	20/60	75
736	Wolf Hill Section 1	907.01	22	92078	4848	0.05	R-50	50	20/60	75
736	Wolf Hill Section 1	907	60.01	181470	Merged w/ lot 49, resubdivided. Not eligible as a cluster lot					
736	Wolf Hill Section 1	907	60.02	40705	4901	0.12	R-50	50	20/60	75
736	Wolf Hill Section 1	907	60.03	44115	4584	0.10	R-50	50	20/60	75
736	Wolf Hill Section 1	907	60.04	41772	4351	0.10	R-50	50	20/60	75
736	Wolf Hill Section 1	907	60.05	35026	4478	0.13	R-50	50	20/60	75
749	Wolf Hill Section 2	907.01	23	50000	4847	0.10	R-50	50	20/60	75
749	Wolf Hill Section 2	907.01	24	36959	4917	0.13	R-50	50	20/60	75
749	Wolf Hill Section 2	907.01	25	39195	4109	0.10	R-50	50	20/60	75
749	Wolf Hill Section 2	907.01	26	52087	4367	0.08	R-50	50	20/60	75
749	Wolf Hill Section 2	907.01	27	82761	4367	0.05	R-50	50	20/60	75
749	Wolf Hill Section 2	907.01	28	103362	6091	0.06	R-50	50	20/60	75
749	Wolf Hill Section 2	907	60.06	49780	4865	0.10	R-50	50	20/60	75
749	Wolf Hill Section 2	907	60.07	45500	5552	0.12	R-50	50	20/60	75
749	Wolf Hill Section 2	907	60.08	95106	4336	0.05	R-50	50	20/60	75
749	Wolf Hill Section 2	907	60.09	69310	58790	0.85	R-50	50	20/60	75
749	Wolf Hill Section 2	907	60.10	636150			Open Space Lot			
3512	Wolf Hill Section 3	907.01	3	35100	4959	0.14	R-50	50	20/60	75
3512	Wolf Hill Section 3	907.01	4	37833	4625	0.12	R-50	50	20/60	75
3512	Wolf Hill Section 3	907.01	5	48731	5284	0.11	R-50	50	20/60	75

File Map	Name	Block	Lot	Square Feet of Lot	2015 *Principal Building S.F. (not including accessory)	PRIOR F.A.R. (not including accessory)	Zone (2015)	File Map Front Yard	File Map Side Yard/Total	File Map Rear Yard
3512	Wolf Hill Section 3	907.01	6	37198	4919	0.13	R-50	50	20/60	75
3512	Wolf Hill Section 3	907.01	7	44405	5444	0.12	R-50	50	20/60	75
3512	Wolf Hill Section 3	907.01	8	68452	5378	0.08	R-50	50	20/60	75
3512	Wolf Hill Section 3	907.01	9	42398	5090	0.12	R-50	50	20/60	75
3512	Wolf Hill Section 3	907.01	10	39851	5439	0.14	R-50	50	20/60	75
3512	Wolf Hill Section 3	907.01	11	53893	4676	0.09	R-50	50	20/60	75
3512	Wolf Hill Section 3	907.01	12	35224	4536	0.13	R-50	50	20/60	75
3512	Wolf Hill Section 3	907.01	13	53497	5231	0.10	R-50	50	20/60	75
3512	Wolf Hill Section 3	907.01	14	63928	4830	0.08	R-50	50	20/60	75
3512	Wolf Hill Section 3	907.01	15	72898	5916	0.08	R-50	50	20/60	75
3512	Wolf Hill Section 3	907.01	16	35665	4919	0.14	R-50	50	20/60	75
3512	Wolf Hill Section 3	907.01	17	44974	4293	0.10	R-50	50	20/60	75
3512	Wolf Hill Section 3	907.01	18	44724	5246	0.12	R-50	50	20/60	75
3512	Wolf Hill Section 3	907.01	19	52531	5301	0.10	R-50	50	20/60	75
3512	Wolf Hill Section 3	907.01	20	36355	4764	0.13	R-50	50	20/60	75

APPENDICES

VOLUME 3

HISTORIC CEMETERIES

Full Copy Available at the Planning Office

33

Old Burial Grounds of Bridgewater Township

A survey of ancient and historic family cemeteries of Bridgewater, NJ

J.D. Koblan
Life Scout, BSA Troop 154
Pluckemin, N.J.
July 2004

Note: J.D. Koblan completed all of his Eagle requirements and passed his Eagle Board of Review to become an Eagle Scout on October 18, 2004.

DEDICATION

This work is dedicated to Sean Kirk for the tremendous amount of time he spent in setting up the gravesite pages, and to Mr. Kevin Kirk for all his time, encouragement, guidance and patience. Thank you!

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Acknowledgments

I wish to thank the following people who helped me with the project:

- Mr. Chip Mills, Chief Engineer of Bridgewater Township, for making the project available to me and for helping me get going on it.
- Mrs. Dorothy Stratford, Vice President of Somerset County Historical Society, for her incredible help and vast knowledge of the history of the area.
- Mrs. Jane Hylicke, Head New Jersey Reference Librarian of the Somerset County Library, for her assistance with research.
- Mrs. Dorie Zuidervliet, BSA Troop 154, for her help and enthusiasm for the project.
- Mr. Kevin Kirk, BSA Troop 154, for all his time, encouragement, guidance and patience.
- The following youth volunteer helpers:
    - Sean Kirk, Eagle Scout, Troop 154
    - Greg Bernero, First Class Scout, Troop 154
    - Sean Brooks, First Class Scout, Troop 154
    - Kevin Campbell, Life Scout, Troop 154
    - Ryan Campbell, Life Scout, Troop 154
    - James Fabregas, Life Scout, Troop 154
    - Vince Libasci, Star Scout, Troop 154
    - Brad Weaver. Life Scout, Troop 154
    - Brian Zuidervliet, Second Class Scout, Troop 154
    - Kevin Zuidervliet, Second Class Scout, Troop 154
    - Jeff Englander, Troop 53
    - Steve Pelegrino, friend from school
- And last, but certainly not least, my parents, John and Julie Koblan, for all they have done to help me.

Introduction

During the post World War II era, the Township of Bridgewater, NJ was rapidly changing from a rural community to a suburb. Large tracts of land and farms were rapidly disappearing due to increasing development. As a result of this growth, part of the Township's history was becoming lost forever with the disappearance of its old family burial grounds.

My objective for this project was to find existing family cemeteries that contained small numbers of graves and were used before larger public and private cemeteries came into existence in the late 1800's. In total, we were able to locate eleven such cemeteries, and because of the ravages of time, five others that we learned of no longer exist.

The further objectives of this project was to compile and document for posterity information on the remaining burial sites so that the community, historians and future generations will have a definitive resource to refer to, in order to preserve part of the history of Bridgewater.

In order to meet these objectives, my project included the following steps:

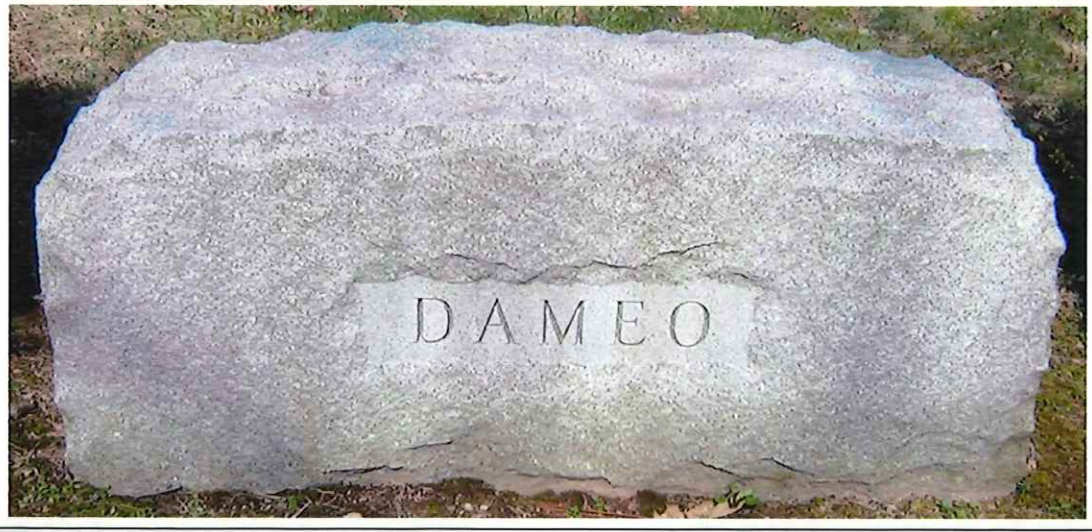
- Locate and identify all of the existing family burial grounds.
- Record the names of the people interred and photograph each headstone's inscription.
- Locate each burial ground on the actual Township tax map and include a detailed sketch of each showing the location of each grave.
- Compile a list of war veterans found in these burial grounds.
- Include an overview map of Bridgewater showing the approximate location of each of the burial grounds found.

Name of Cemetery: Castner-Compton Cemetery	Grave # CC 37
Location: 200 yds north into woods opposite VoTech on Vogt Drive	
Name of recorder: Sean Kirk	Date: May 15, 2004
Name of person interred: Ann Hawley	
Date of birth (if shown):	
Date of death: February 17, 1844	
Age at death: 67 years	
Type of gravestone (headstone, footstone, etc): headstone	
Position of gravestone (upright, flat on ground, etc): leaning against post	
Material: limestone	
Approximate size (height x width x depth): 20" x 21" x 3"	
General condition of gravestone: poor - broken in pieces, hard to read	
Noticeable repair work: none	
Stonecarver information: none	
Inscription: (exactly as carved. Use letter X for unreadable letters.) and/or photo.	

In
Memory of
ANN HAWLEY
wife of
ISAAC HAWLEY
WHO DIED
Feb. 17TH 1844
IN THE 67TH YEAR OF HER LIFE

Farewell conflicting hopes and fears
Where lights and shades xxxxx xxxxxx
How bright th' unchanging xxxxxx
Farewell xxxxxxxx world farewell.

Name of Cemetery: Mountain Top Cemetery	Grave # MT 37
Location: Intersection of Mountain Top, Steele Gap Roads & Newmans Lane	
Name of recorder: John Koblan Sr.	Date: April 17, 2004
Name of person interred: Rocco Dameo & Natalie R. Dameo	
Date of birth (if shown): 1910 1909	
Date of death: 1978 1987	
Age at death (if shown):	
Type of gravestone (headstone, footstone, etc): family memorial + 2 flat grass markers	
Position of gravestone (upright, flat on ground, etc): upright & flat	
Material: granite	
Approximate size (height x width x depth): 25" x 60" x 16" memorial + 2 markers - 13" x 25" each	
General condition of gravestone: very good	
Noticeable repair work: none	
Stonecarver information: none	
Inscription: (exactly as carved. Use letter X for unreadable letters.) and/or photo.	



Prince Roges Cemetery

This is a small lot located about 200 yards east of North Bridge Street on a knoll on the south side of Foothill Road. This cemetery is a three sided lot wedged between two private residences. The cemetery is classified as abandoned although some attempt had been made in the past to prevent it from becoming overgrown by placing black plastic and wood chips on the ground.

This cemetery was also once known as the Vanderveer Burying Ground, and according to the book, "North of the Raritan Lotts" published in 1975, this cemetery "is thought to contain graves of the old Vanderveer family's black servants." There appears to be 6 headstones here but only 1 of them is fully intact at this time but that one is worn flat with no inscriptions legible. The rest of the headstones are broken in numerous pieces and are extremely hard to identify except for one having the name Prince Rogers and another being Sarah Van Zandt's.

Based on the inscriptions published in the January 5, 1940 edition of the Somerset Messenger-Gazette, the following people are buried here:

- Simon Vanderveer, d. April 12,1867 in 65th year.
- Sarah Van Zandt, widow of William Stryker, b. April 25, 1771, United with the 2nd R. D. Church in the 82nd year of her life. D. July 31, 1861, aged 90 yrs. 3 mos. 6 days.
- Deny, dau. of Thomas and Dinah Vanderveer, d. Nov. 8, 1857, in 31st yr.
- Phebe Lane, b. Nov. 15, 1826, d. Aug. 20, 1873.
- Dinah, wife of Thomas Vanderveer, d. Dec. 28, 1857 in 59th yr.
- Father and Mother, Prince Rogers, b. Sept. 29, 1815, d. Jan. 26, 1889. Wife of Prince Rogers, b. Apr. 20, 1820, d. May 16, 1882.

Note: Marriage records of the nearby North Branch Reformed Church have the following record:

May 29, 1851 - Prince Roger to Dina Hogland (colored)

Name of Cemetery: Prince Rogers Cemetery	Grave # PR 1
Location: Knoll on south side of Foothill Rd, 200 yards east of North Bridge St	
Name of recorder: Sean Kirk	Date: May 25, 2004
Name of person interred: Prince Rogers and his wife	
Date of birth (if shown): Sept. 29, 1815	April 20, 1820
Date of death: January 26, 1889	May 16, 1882
Age at death (if shown):	
Type of gravestone (headstone, footstone, etc): headstone broken in pieces	
Position of gravestone (upright, on ground, etc): bottom upright in base, part of top on ground, other pieces missing	
Material: white marble	
Approx. size (height x width x depth): 2 pieces: (20"x 22" x 3") + (20" x 18" x 3")	
General condition of gravestone: broken, old, faded - parts of inscription missing and not legible	
Noticeable repair work: none	
Stonecarver information: none	
Inscription: (exactly as carved. Use letter X for unreadable letters.) and/or photo.	

Note: Most of the inscription is missing or extremely hard to read. Anything that could not be read was copied from a January 5,1940 article in the Somerset Messenger-Gazette.

Name of Cemetery: Vanderveer Family Cemetery #1	Grave # V1- 9
Location: 200 yards west of North View Drive beyond end of sewer easement	
Name of recorder: J.D. Koblan	Date: May 29, 2004
Name of person interred: Samuel G. Vanderveer	
Date of birth (if shown): November 1, 1844	
Date of death: August 21, 1876	
Age at death (if shown):	
Type of gravestone (headstone, footstone, etc): headstone	
Position of gravestone (upright, flat on ground, etc): upright	
Material: limestone	
Approximate size (height x width x depth): 30" x 22" x 3"	
General condition of gravestone: good	
Noticeable repair work: none	
Stonecarver information: none	
Inscription: (exactly as carved. Use letter X for unreadable letters.) and/or photo.	

IN
Memory of
SAMUEL G. VANDERVEER
BORN
Nov. 1, 1844
DIED
Aug. 21, 1876

Van Veghten - Smith Burying Ground

This burying ground is located on the property of National Starch and is enclosed by a chain link fence with padlocked gate. According to Snell's History of Somerset County written in 1881, this burying ground was part of a grave yard that surrounded an old church that was built there along the north bank of the river in 1721. "Among those buried there were Rev. John Frelinghuysen and Rev. Theo. E. Romeyn. The old church stood there for 58 years until burned down during Simcoe's raid, year 1779. Many bodies were later removed to the Raritan (Somerville) cemetery." At the time of Snell's History (1881) there were only three stones left at the burying ground. Those three stones were for Derick Van Veghten (died Nov. 29, 1781), Margaret Van Veghten (wife of Joseph Crane, born ---1763, Died May 27, 1812), and Catherine Taylor (died Feb. 7,1829).

Herbert E. Durham copied the headstones and they were published in the Somerset Messenger-Gazette, January 26, 1940 edition. At that time, Catherine Taylor's stone was gone and Margaret Van Veghten's stone is also gone today.

According to the Somerset Messenger-Gazette article noted above, when the land south of the river was sold to Johns-Manville Company for their plant, the stones and contents of the Peter Smith family burying ground that was located on that property were moved to this location. In the 1940 article it is noted that some the Smith family stones were broken and hard to read at that time. Several of them can not be read today, but the following is a list of what was moved:

Peter Smith, d. July 4, 1816, age 75.5.16
Sarah Smith, d. Feb. 22.1813, age 90.11.27
Jonathan Smith, d. Jan. 22, 1840, age 63.8.24
Nancy, wife of Jonathan Smith, d. Sept. 29, 1826, age 47.9.19
Eliza Ann, dau. of Jonathan & Nancy Smith, d. Feb. 28, 1823, age 1 year
Isaac P. Smith, d. Feb. 1, 1855, age 74.3.22
Ann, wife of Isaac P Smith, d. Nov. 8, 1854, age 69.11.1
Jonathan, son of James L. & Mariah Voorhees, d. Aug. 1, 1834
Margaret Ann, dau. of Thomas D. & Sarah B. Smith, d. Oct. 1, 1840, age 5.8.6
Son of Thomas D. & Sarah B. Hartough, d. Sept. 26, 1840, age 2.0.19

APPENDICES

VOLUME 4

2006 FINDERNE NEIGHBORHOOD STUDY

Kitchen & Associates Architectural Services, PA

Finderne Neighborhood *Plan*

Bridgewater, New Jersey | March 1, 2007

Kitchen & Associates Architectural Services, PA

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I. Overview

II. Streetscape

III. Facades

FINDERNE NEIGHBORHOOD PLAN

BRIDGEWATER, NEW JERSEY

Kitchen & Associates Architectural Services, PA

Community Sign & Monument at Finderne Avenue & East Main Street

Architecture
Planning
Interior Design

FINDERNE NEIGHBORHOOD PLAN
BRIDGEWATER, NEW JERSEY

OVERVIEW:

Project Background
Kitchen & Associates was contracted by the Township of Bridgewater to provide professional planning and design services for the Finderne Neighborhood Area in Bridgewater, New Jersey.

Purpose of the Study
The intent is to create a catalyst for uniting the neighborhood through design elements, and ultimately through community collaboration.

Neighborhood History
This land was originally chartered by King George II of England in 1749 and incorporated in 1899. The Finderne Neighborhood is located in southeastern Bridgewater between Bound Brook and Somerville and has a diverse land use pattern including older neighborhoods, new developments, and a range of commercial and industrial properties.

Project Goals
The Finderne Neighborhood Plan was envisioned to provide the neighborhood with a set of suggestions and guidelines to help unify and realize the full potential of the eclectic area. Through a series of committee meetings, a set of goals was determined to achieve this potential.

These goals included: identifying a visual identity and "sense of place"; defining gateways and focal points for regional and neighborhood connectivity; developing cost effective and attractive streetscape criteria; façade improvement guidelines; traffic calming; safety improvements; maintain and continue integration of diverse uses such as the Residential, Commercial, Retail, Industrial, Municipal & Transportation.

Project Process
The process of quantifying these goals involved photographic surveys, walking tours, and interviews with residents and local merchants. This process produced solutions, which addressed multiple areas of concern. Through careful documentation, these solutions were recorded and developed as identified below.

STREETSCAPE:

Gateways
Combine signage with new landscaping in order to create "gateways" or easily identifiable entrances to the neighborhood. These gateways are located at the intersection of East Main Street & Finderne Avenue, and East Main Street & Polhemus Lane.

Signage, Community Identification & Way finding
Implement signage standards to reinforce a set of guidelines, which provide a visual continuity, while allowing for personal expression and product display. Consistent street signage also helps to differentiate the Finderne Neighborhood from its neighbors.

Limit signage illumination to shielded lighting, mounted either projecting off the signage face, along the top edge or along the bottom edge of the sign. Discourage flood lighting signs from grade or internally illuminated signage.

Pedestrian Paving & Pathways
Differentiate pedestrian pathways with consistent and themed paving patterns. These patterns allow the pedestrian and the driver to clearly distinguish areas with a pedestrian right of way, ultimately providing a safer experience for the pedestrian.

Street Islands
Introduce street islands where practical, to provide additional vertical elements at the center of the four lane highway, which serve as a resting place for crossing pedestrians and affect traffic calming.

Curb Cut Reductions
Reduce curb cuts along East Main Street to provide the opportunity for additional landscape and green buffers, creating a positive rhythm for movement and continuity throughout the neighborhood.

Re-routing Truck & Vehicular Access
Encourage alternate routes for truck traffic so that East Main Street becomes a safer corridor for small vehicle traffic. These alternate routes also help ease the load of traffic entering on to East Main Street between intersections, encouraging the even and safe flow of traffic.

Parking Reorganization & Consolidation
Reconfigure off-street commercial parking to increase parking efficiency in selected locations in tandem with curb cut and paving reductions. Encourage the reconfiguring and linking of parking behind multiple retail locations along East Main Street which creates a secondary shopping corridor, encourages single stop shopping, and reduces vehicular re-entry and re-exit along East Main Street.

Lighting
Position new street lighting and streetscape appurtenances at regular intervals in order to create safe pedestrian paths, control vehicular access and promote a calming effect on traffic. Streetlights also serve as the structure for seasonal & community banners/flags, to reinforce a visual identity and a sense of place.

Utility Poles
Enhance existing utility poles with decorative fencing that provides a consistent aesthetic appearance, works in tandem with streetlight community banners, establishes a comforting barrier between pedestrian and vehicular traffic, exerts a calming effect on traffic, and directs attention away from overhead wiring.

Green Buffers, Screens & Barriers
Buffer with landscape and green elements to provide a natural barrier. This physical and perceptual barrier enhances safety, screens distracting adjacent uses/facilities, reinforces community aesthetics, yields environmental benefit and beautifies the neighborhood.

Decorative Fencing
Buffering with decorative fencing, much like green screening, provides attractive physical and perceptual barriers, offers a traditional identification of property limits, reinforces pathways and ensures pedestrian safety. Fencing also provides the framework & structure to support additional site appurtenances, including flags, plants, and trash receptacles.

Site Appurtenances
Establish a standardized palette of site elements for use along East Main Street in order to contribute to the overall appearance and image of the neighborhood. Through the use of standard mailboxes, trash receptacles, fencing, lighting, and door numbers, the neighborhood promotes a continuity of place.

FAÇADE IMPROVEMENT *GUIDELINES:*

Standardized Color Palettes
Establish a selection of coordinated standard color palettes, which allows residents the freedom to express themselves while maintaining a common theme. These color schemes, as selected from the F&H Historic Colors of America Palette provide overall continuity to East Main Street, and assist in the integration of the varied uses.

Consistent Property Number Identification
Promote public safety with a standard form of property identification and location so emergency personnel are able to clearly and efficiently locate a property number.

ZONING *OVERVIEW:*

Existing Zoning
Zoning along East Main Street is evening divided between Single Family Residential (R-10), Neighborhood Business (C-1) and Manufacturing (M-1A).

Zoning Recommendations
Propose re-zoning the M-1A portion between Polhemus and Finderne to C-1, such that a more intimate entrance to the Finderne neighborhood can be established, while maintaining current occupancies, uses, jobs and revenue. Possible relocations for existing manufacturers within M-1A exist further along East Main Street between Foot Hill and Chimney Rock Road, within the existing Manufacturing Corridor.

Encourage existing occupancies and uses to remain and improve concurrent with the overall Finderne improvements effort.

Signage Regulations
Signage standards in this report are based on current requirements and regulations of the Bridgewater Township zoning ordinance regarding overall square footage, but also introduce consistent elements and proportions that are intended to create continuity, less distraction, better readability and reinforce the sense of community.

NEXT *STEPS:*

Township Council & Planning Board
- Secure Municipal endorsement of these guidelines
- Encourage residents, merchants and developers to incorporate guidelines into their current and future plans.
- Support continuing refinement of the recommendations defined herein and authorize subsequent studies identified below.
- Maintain open and continuing communications with the Finderne community.

Funding Sources
- Seek public and private funding sources as well as incentive programs for: municipal infrastructure reconstruction; streetcar's implementation; and facade improvements.

Streetscape Implementation
- Prioritize safety, lighting, pathway, site appurtenance and landscape improvements for the targeted study area.
- Establish time lines and budgets for implementation.
- Coordinate with proposed new development within the targeted study area.
- Commence phased engineering based upon priorities and funding.
- Select patterns, materials, banners & systems.

Subsequent Studies
- Investigate and refine recommendations for potential vehicular linkage, improved parking efficiency and overall safety behind commercial properties along East Main Street.
- Review current Zoning Ordinances to encourage property enhancement by current residents & merchants, maintain current uses, promote investment and improve property values.
- In conjunction with Public Safety and County Engineers analyze and recommend specific improvements to East Main Street and adjacent cross street configurations, traffic patterns, traffic signage, traffic controls, vehicular use capacities, localized neighborhood impacts and community needs.
- Refine parameters and define specific routes for alternative vehicular pathways, in order to reduce impacts on adjacent residential areas.
- Generate safety improvement recommendations at Railroad Crossing.

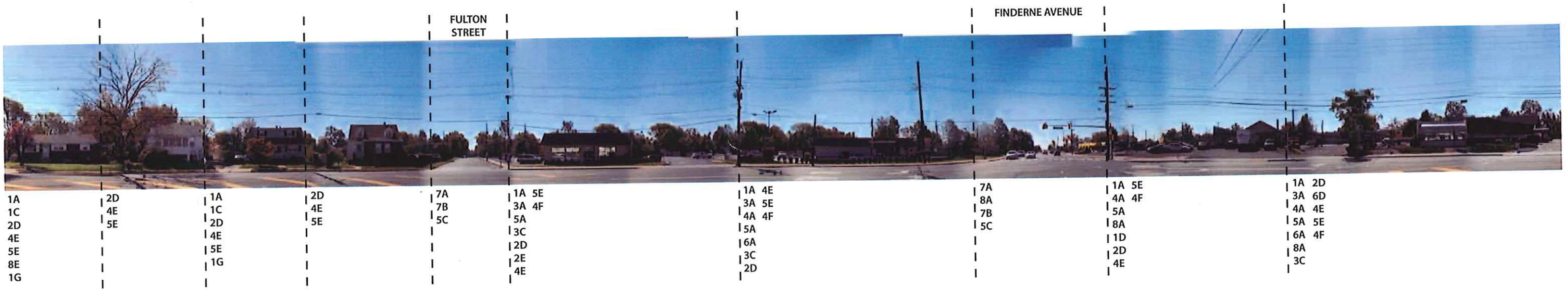
I. Overview

II. Streetscape

III. Facades

FINDERNE NEIGHBORHOOD PLAN

Bridgewater, New Jersey



Legend

1 ARCHITECTURAL ELEMENTS

1A	Apply Decorative Cornice At Roof
1B	Apply Decorative Cornice Under Windows
1C	Add/Replace Shutters
1D	Install New Doors
1E	Apply Medallions
1F	Apply Bracket
1G	Apply Columns/Porch
1H	Replace Hardware
1I	Infill Building

2 EXTERIOR MATERIALS

2A	Refinish/Clean Existing Finish
2B	Infill Brick
2C	Add Stucco
2D	Paint As Indicated
2E	Apply Wood Trim
2F	Build Up Facade

3 STOREFRONT ELEMENTS

3A	Install Storefront Windows
3B	Refinish Entrance Steps
3C	Install Awnings

4 SIGNAGE

4A	Install Exterior Post Wall Mounted or Monumental Sign
4B	Install Projecting/Blade Sign
4C	Install Interior Illuminated Sign
4D	Install Neon Sign
4E	Install Address Numbers
4F	Install Driveway Entrance Sign

5 LIGHTING

5A	Install Downlights
5B	Install Uplights
5C	Install Street Lights
5D	Install Accent Lights
5E	Install Entrance Light at Door

6 FURNITURE

6A	Provide New Tables/Chairs
6B	Provide New Umbrellas
6C	Provide New Bollards
6D	Provide New Trash Cans : Pole-Mounted/Floor
6E	Provide New Fences/Gates
6F	Provide New Chairs
6G	Provide New Benches

7 PEDESTRIAN FLOW

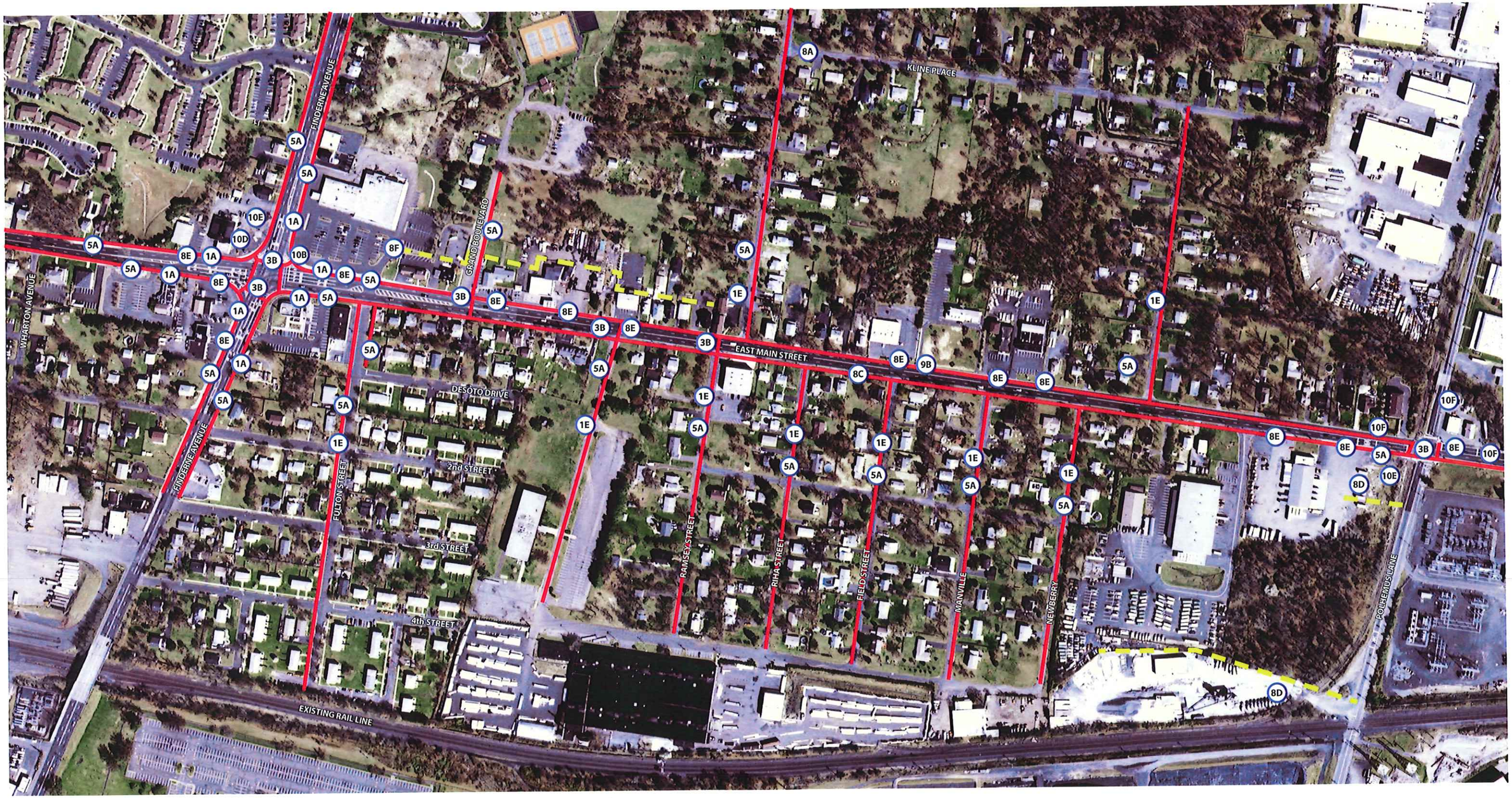
7A	Add Crosswalk
7B	Add Pedestrian Signage

8 LANDSCAPING

8A	Install New Street Trees
8B	Install New Planters/ Benches
8C	Install New Playground Structure
8D	Install New Public Art/Sculpture/ Memorial
8E	Install New Plants

FINDERNE NEIGHBORHOOD PLAN

BRIDGEWATER, NEW JERSEY



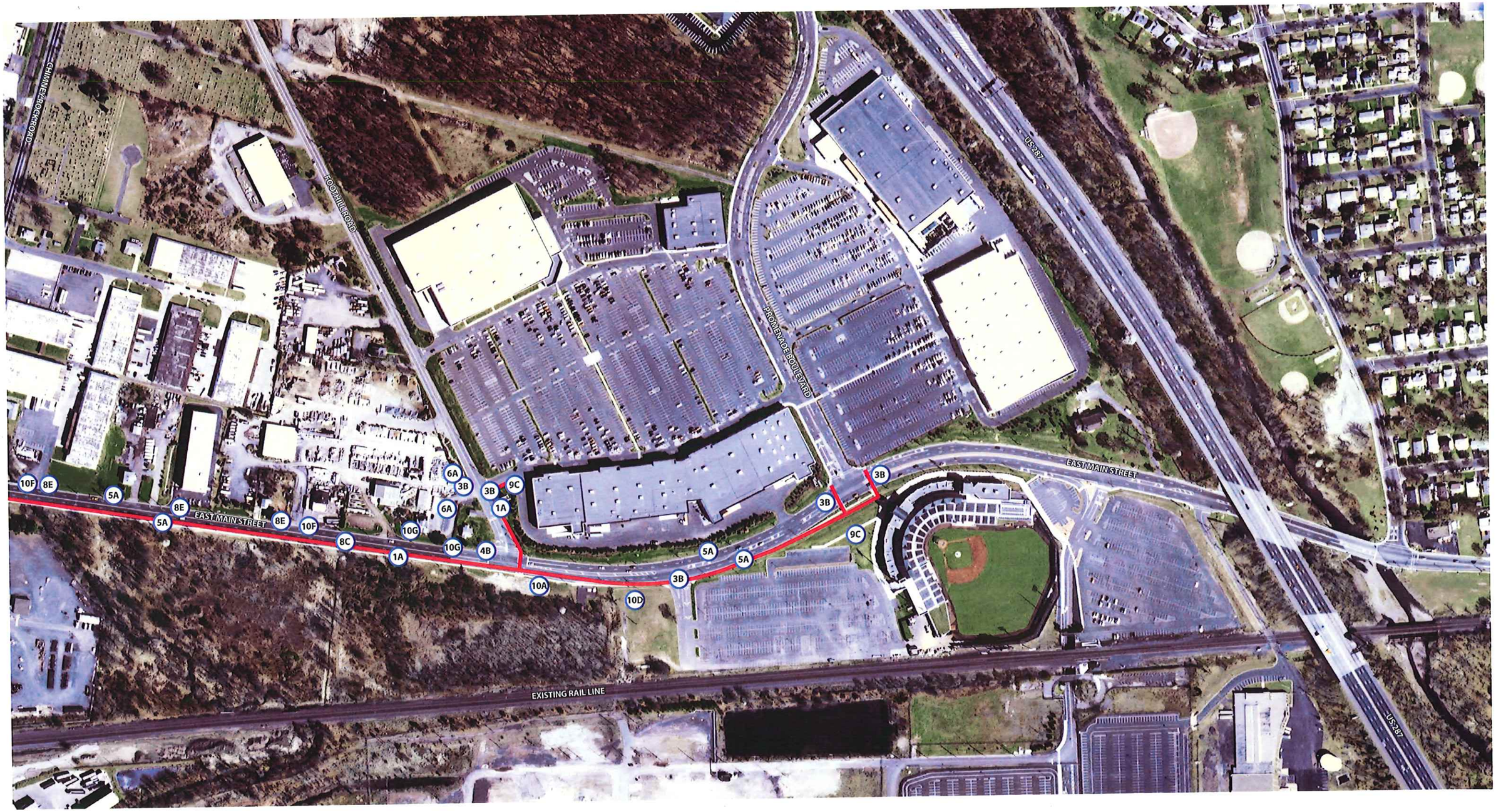
Kitchen & Associates Architectural Services, PA

Site Plan with Keynotes

Architecture
Planning
Interior Design

FINDERNE NEIGHBORHOOD PL.

BRIDGEWATER, NEW JERSE.



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Site Plan with Keynotes

Architecture
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FINDERNE NEIGHBORHOOD PLAN

BRIDGEWATER, NEW JERSEY

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1D Basketweave Field in a Mottled Mix w/Darker Stack Bond Borders.
1E Brick Border w/ Concrete Field

2 CURBS
2A Option #1 – Patch & Repair Existing Curbs.
2B Option #2 – New Concrete Curbs.
2C Re-Paint Yellow Caution Paint for No Parking Zones.

3 CROSSWALKS
3A Option #1 - High Strength Colored & Stamp Patterned Concrete to Match Sidewalk Concrete Pavers & Patterns on Sidewalk. Consider Colorized Asphalt Only if Cost Considerations so Require.
3B Option #1 – Concrete Pavers on 3/4" Bituminous Setting Bed & 6" Concrete Slab Substrate w/Concrete Band or Steel Edge Restrainers.

4 TRAFFIC LIGHTS & POLES
4A Bracket Armed Black Painted Steel Poles w/NJDOT Fixtures, Walk/Don't Walk & Street Identification Signs.
4B Paint Steel Poles Black for Traffic Lights, Street Identification, and Walk/Don't Walk Signs.

5 STREET LIGHTS & POLES
5A Option # 1 - Bracket Armed, 23' High Black Painted Steel Poles w/PH20 Luminaire on CAM Series Aluminum Roadway Arms Mounted at 23' (roadway)16' (sidewalk) perpendicular to Street. Spacing @ 225' UNO if Funding Permits.
5B Option #2 - Paint Black All Existing Steel Light Poles

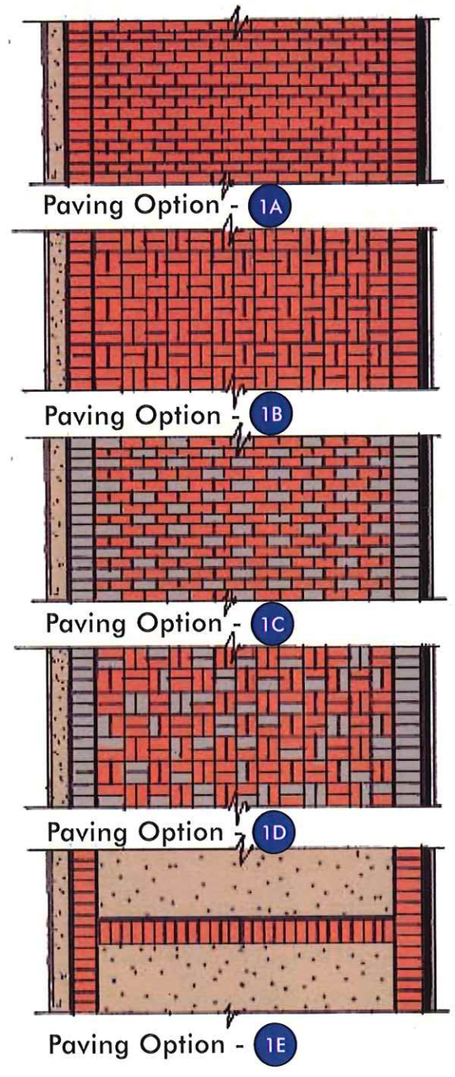
6 BOLLARDS/PIER
6A Cast Iron, Black Painted Bollards to Match Light Poles at Key Intersections and Neighborhood Meeting Areas for Protection.

7 CAST IRON TREE GRATES
7A 3'x 6' Cast Iron Tree Grates at Trees and Power Poles

8 STREET CARTWAY
8A Provide 3 Way Stop
8B Reduce Speed Limit
8C Provide Bicycle Friendly Designated Bike Path
8D Provide Alternate Route for Vehicular Traffic
8E Reduce Curb Cuts
8F Link Parking

9 RAILINGS/FENCE/ STREET ACCESSORIES
9A Black, Painted, Steel, Roman or Similar Decorative Designed Railing @ 3'6" in Height
9B 72" Black, Painted, Steel Fence Posts with Banner Arms and Flower Pot Brackets
9C Explore Bicycle Friendly, Racks & Related Provisions
9D Introduce Mailbox Standard w/ Bollard

10 LANDSCAPING
10A Install Tree Planters/Benches
10B Provide Grass Island
10C Infill Median w/ Landscape and Paving Combination
10D Install New Public Art/ Sculpture/ Memorial
10E Community Monument Identification Sign
10F Install "Green Screen"
10G Install Soft or Hard Barrier to Prevent Access



FINDERNE NEIGHBORHOOD PLAN

BRIDGEWATER, NEW JERSEY

Kitchen & Associates Architectural Services, PA

Shopping Center at Grand Boulevard & East Main Street

Architecture
Planning
Interior Design

FINDERNE NEIGHBORHOOD PLAN

BRIDGEWATER, NEW JERSEY

1	CONCRETE PAVING
1A	Running Bond Field w/Stack Bond Borders & Uniform Color.
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1C	Running Bond Field in a Mottled Mix w/Darker Stack Bond Borders.
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1E	Brick Border w/ Concrete Field
2	CURBS
2A	Option #1 – Patch & Repair Existing Curbs.
2B	Option #2 – New Concrete Curbs.
2C	Re-Paint Yellow Caution Paint for No Parking Zones.
3	CROSSWALKS
3A	Option #1 - High Strength Colored & Stamp Patterned Concrete to Match Sidewalk Concrete Pavers & Patterns on Sidewalk. Consider Colorized Asphalt Only if Cost Considerations so Require.
3B	Option #1 – Concrete Pavers on 3/4" Bituminous Setting Bed & 6" Concrete Slab Substrate w/Concrete Band or Steel Edge Restrainers.
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5B	Option #2 - Paint Black All Existing Steel Light Poles
6	BOLLARDS/PIER
6A	Cast Iron, Black Painted Bollards to Match Light Poles at Key Intersections and Neighborhood Meeting Areas for Protection.
7	CAST IRON TREE GRATES
7A	3'x 6' Cast Iron Tree Grates at Trees and Power Poles
8	STREET CARTWAY
8A	Provide 3 Way Stop
8B	Reduce Speed Limit
8C	Provide Bicycle Friendly Designated Bike Path
8D	Provide Alternate Route for Vehicular Traffic
8E	Reduce Curb Cuts
9	RAILINGS/FENCE/ STREET ACCESSORIES
9A	Black, Painted, Steel, Roman or Similar Decorative Designed Railing @ 3'6" in Height
9B	72" Black, Painted, Steel Fence Posts with Banner Arms and Flower Pot Brackets
9C	Explore Bicycle Friendly, Racks & Related Provisions
9D	Introduce Mailbox Standard w/ Bollard
10	LANDSCAPING
10A	Install Tree Planters/Benches
10B	Provide Grass Island
10C	Infill Median w/ Landscape and Paving Combination
10D	Install New Public Art/ Sculpture/ Memorial
10E	Community Monument Identification Sign
10F	Install "Green Screen"
10G	Install Soft or Hard Barrier to Prevent Access

FINDERNE NEIGHBORHOOD PLAN

BRIDGEWATER, NEW JERSEY

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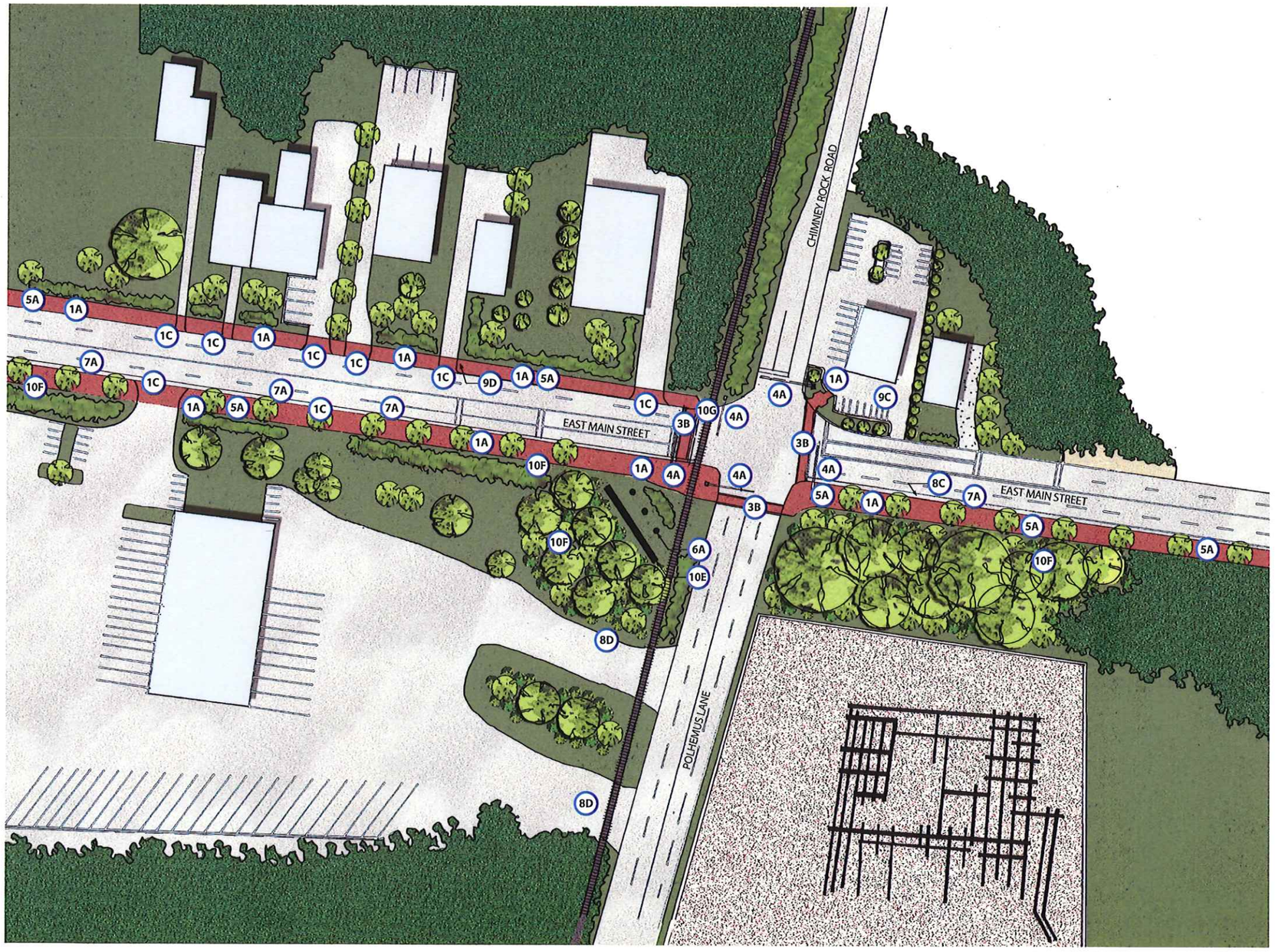
FINDERNE NEIGHBORHOOD PLAN

BRIDGEWATER, NEW JERSEY



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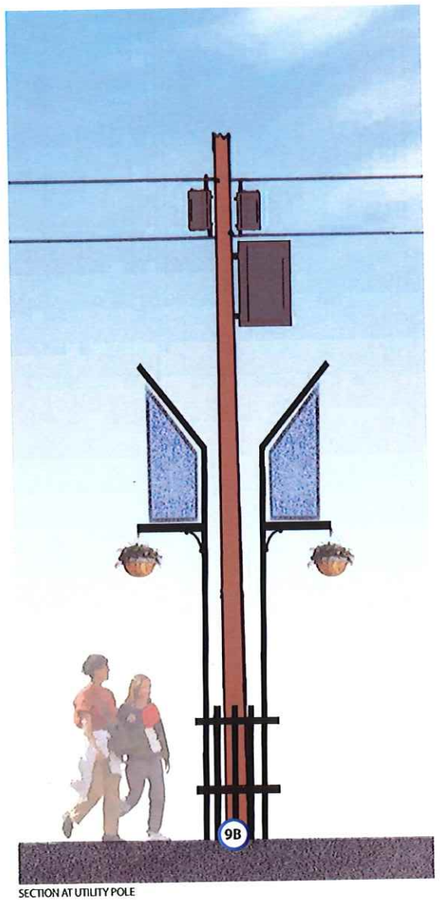
Intersection of East Main Street, Polhemus Lane & Chimney Rock Road

FINDERNE NEIGHBORHOOD PLAN

BRIDGEWATER, NEW JERSEY

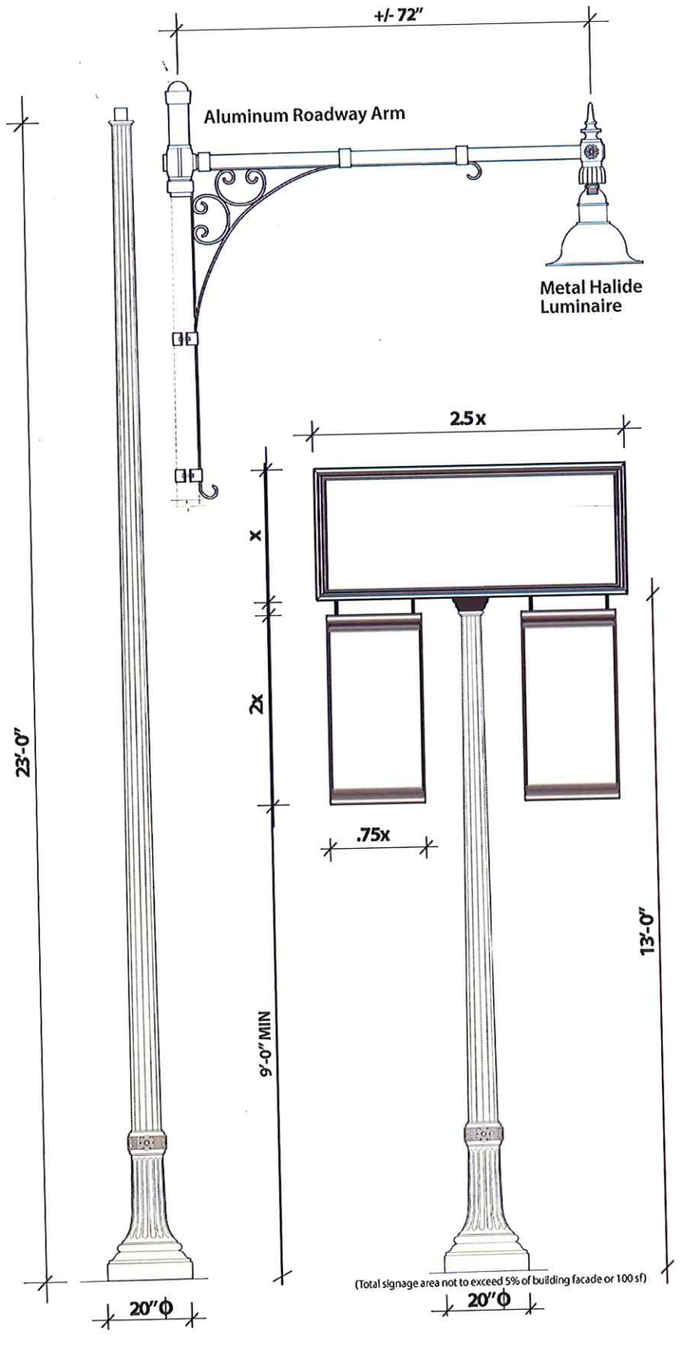


SECTION AT UTILITY POLE

SECTION AT EAST MAIN STREET APPROACHING GRAND AVENUE

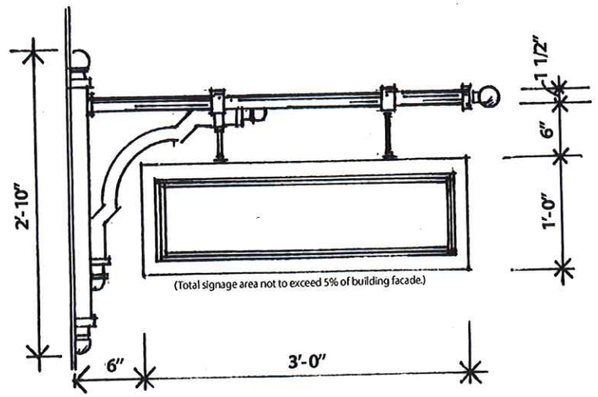
FINDERNE NEIGHBORHOOD PLAN

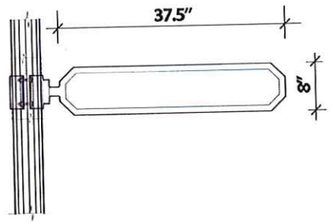
BRIDGEWATER, NEW JERSEY



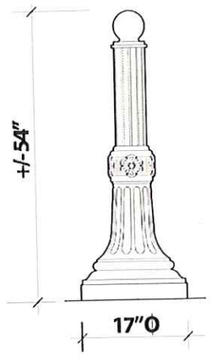
Cast Iron & Steel Post

Cast Iron & Steel Post
w/ Post Mounted Sign

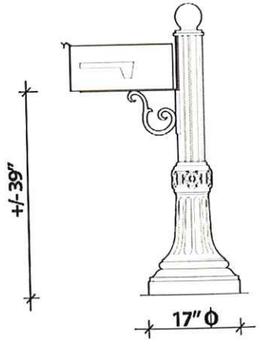




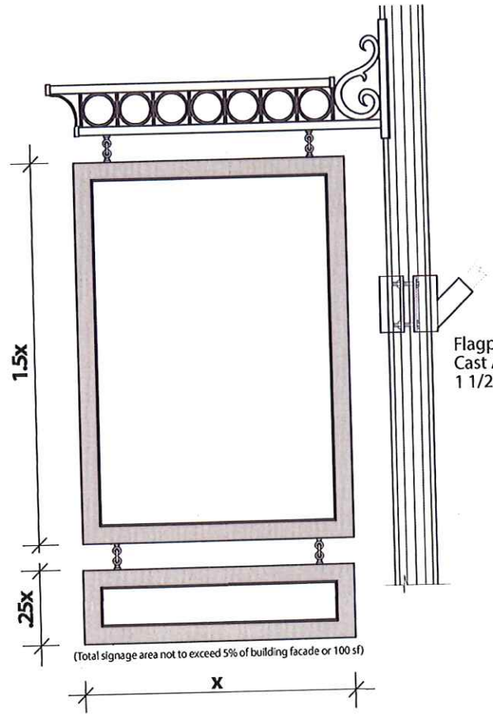
Street Signs
Cast Aluminum Octogonal



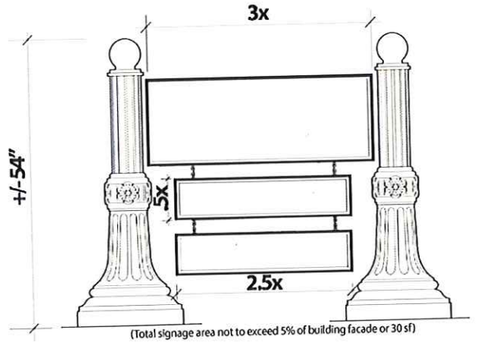
Cast Aluminum Bollard



Mailbox Cast Aluminum
Bollard

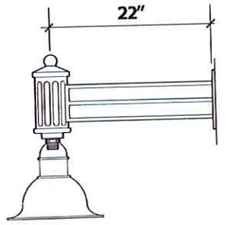


Post Hanging Sign



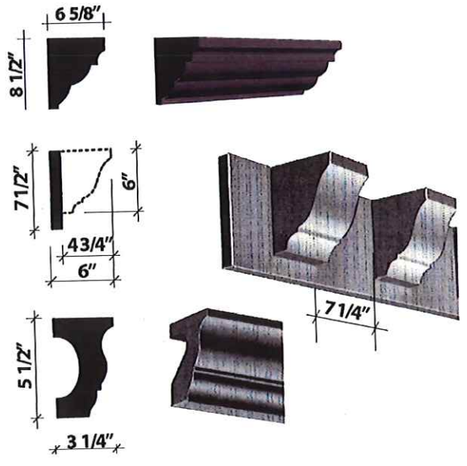
Monumental Sign

Flagpole Holders
Cast Aluminum
1 1/2" Flagpole



Crossarm & Wall Bracket
Metal Halide Lamp

Residential Address Numbers
Copperplate Regular Font



Cornice Options

I. Overview

II. Streetscape

III. *Facades*

FINDERNE NEIGHBORHOOD PLAN

BRIDGEWATER, NEW JERSEY

1B	1A	4F	1B	1A	1B	2D	1B	5C	1B	8E	5C	1A	4E	1C	5E
1C	1F	5A	2D	1B	1C	4E	1C	8E	2D	2D	7A	1B	4F	2D	8E
2D	2D	5C	4E	2D	2D	5E	2D	3C	3C	7B	1F	5A	4B
4E	3A	5E	4E	4E	6D	3C	4B	4E	2D	5C	4E
5E	3C	8E	5E	5E	6G	4B	4E	5A	2F	5E	4F
	4B		8E	8E		4E	5A		5C		3C	8E	5A
	4E					5A					4B		5C

Legend

1 ARCHITECTURAL ELEMENTS
- 1A Apply Decorative Cornice At Roof
- 1B Apply Decorative Cornice Above Windows
- 1C Add/Replace Shutters
- 1D Install New Doors
- 1E Apply Medallions
- 1F Apply Bracket
- 1G Apply Columns/Porch
- 1H Replace Hardware
- 1I Infill Building

2 EXTERIOR MATERIALS
- 2A Refinish/Clean Existing Finish
- 2B Infill Brick
- 2C Add Stucco
- 2D Paint As Indicated
- 2E Apply Wood Trim
- 2F Build Up Facade

3 STOREFRONT ELEMENTS
- 3A Install Storefront Windows
- 3B Refinish Entrance Steps
- 3C Install Awnings

4 SIGNAGE
- 4A Install Exterior Post Wall Mounted or Monumental Sign
- 4B Install Projecting/Blade Sign
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- 5A Install Downlights
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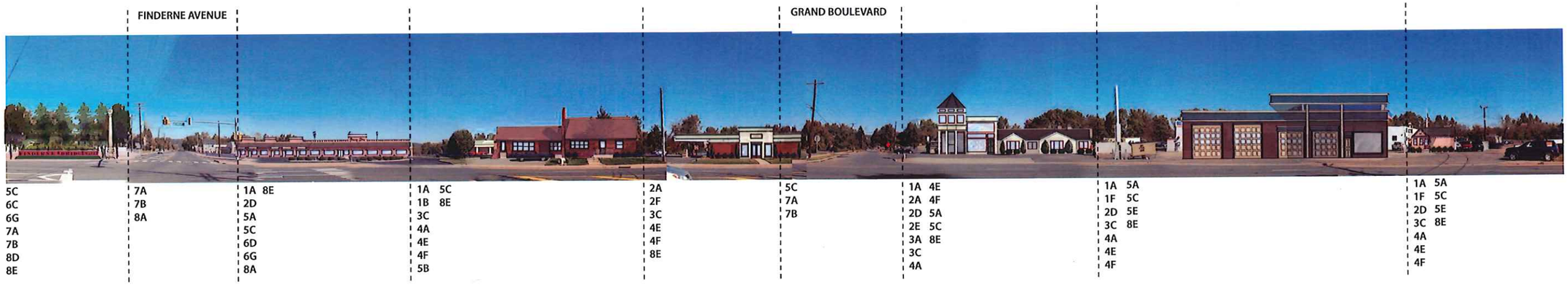
- 8E Install New Plants

FINDERNE NEIGHBORHOOD PLAN

BRIDGEWATER, NEW JERSEY



Legend

1 ARCHITECTURAL ELEMENTS

- 1A Apply Decorative Cornice At Roof
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FINDERNE NEIGHBORHOOD PLAN

BRIDGEWATER, NEW JERSEY

Existing Conditions

Design Option #1

Artist's Rendering: Colors are for reference only. Please refer to F&H Historic Colors of America paint chart.

Design Option #2

Artist's Rendering: Colors are for reference only. Please refer to F&H Historic Colors of America paint chart.

Color/ Paint Scheme #3

F&H Amish Green | F&H Andover Cream | F&H Codman Claret | F&H Terrawood

Color/ Paint Scheme #4

F&H Andover Cream | F&H Jonquil | F&H Coastal Sand | F&H Biloxi Blue

Legend

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FINDERNE NEIGHBORHOOD PLAN

BRIDGEWATER, NEW JERSEY

Existing Conditions

Artist's Rendering. Colors are for reference only. Please refer to F&H Historic Colors of America paint chart.

Design Option #1

Color/ Paint Scheme #1

F&H Roseland | F&H York Bisque | F&H Viscaya | F&H Beauport Aubergine

Artist's Rendering. Colors are for reference only. Please refer to F&H Historic Colors of America paint chart.

Design Option #2

Color/ Paint Scheme #2

F&H Roseland | F&H Lady Banksia | F&H Blue Winged Teal

Legend

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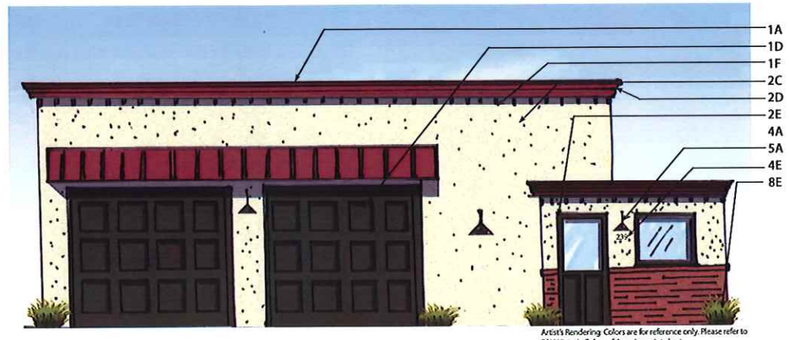
FINDERNE NEIGHBORHOOD PLAN

BRIDGEWATER, NEW JERSEY

Existing Conditions



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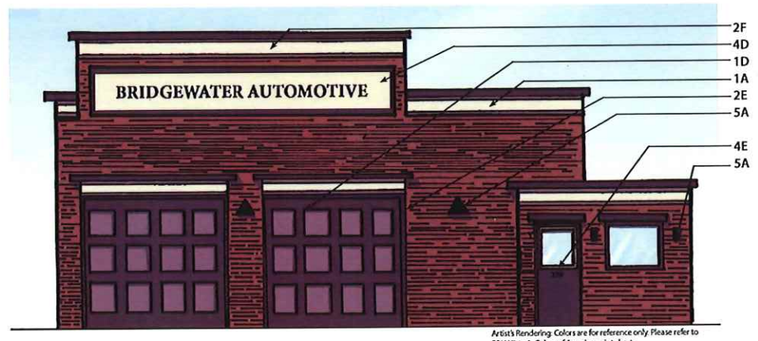

Artist's Rendering. Colors are for reference only. Please refer to F&H Historic Colors of America paint chart.

Design Option #2

Color/ Paint Scheme #5

F&H Gedney Green | F&H Cottage Green | F&H Codman Claret | F&H Emma

Color/ Paint Scheme #6

F&H Muted Mulberry | F&H Jewett White | F&H Plum Island

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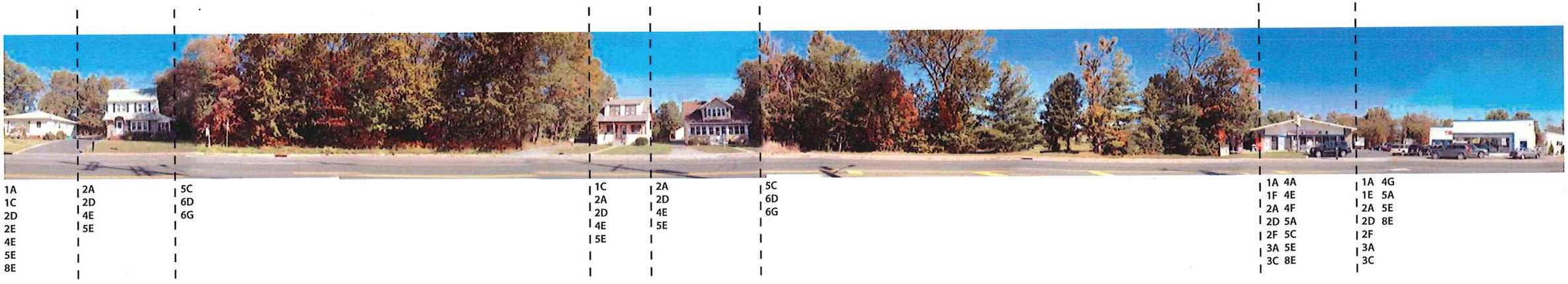
FINDERNE NEIGHBORHOOD PLAN

Bridgewater, New Jersey



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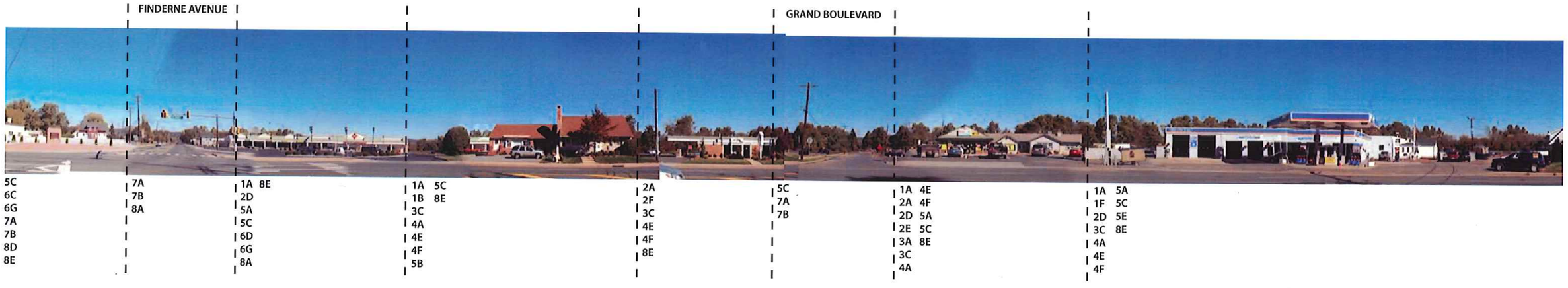

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Kitchen & Associates Architectural Services, PA

East Main Street North

Architecture
Planning
Interior Design

APPENDICES

VOLUME 5

MARTINSVILLE SPECIAL DESIGN DISTRICT STANDARDS (SECTION 126-199.2)

Township of Bridgewater, NJ
Thursday, September 11, 2025

Chapter 126. Land Use

Part 8. Site Plan Review

Article XXIV. Design Details and Criteria

§ 126-199.2. Martinsville Special Design District.

[Added 11-18-1991 by Ord. No. 91-33]
The Martinsville Special Design District recognizes the unique character of development as it has evolved in the Village of Martinsville. To preserve and enhance that character, the following guidelines for building design and facade treatment signs, lighting and street furniture should be considered by the Planning Board in reviewing any projects.

A. Building massing and scale.

(1) Buildings with expansive blank walls and all curtain wall structures are discouraged.

(2) Flat, shed and mansard roofs are not recommended; gable roof designs are encouraged.

(3) A human scale should be achieved through the use of scale elements as windows, doors, columns and canopies.

B. Building materials.

(1) Building materials should be compatible with the predominant materials of adjacent structures. The recommended standard is brick with white wood trim.

(2) Aluminum siding, metal panels and mirrored glass surfaces are discouraged.

(3) Metal awnings are discouraged. Awnings should be solid or striped canvas in recommended colors.

C. Building details.

(1) If several storefronts are located in one building, they should be unified in design treatment; e.g., the design of windows and door openings, the use of materials and color.

(2) All storefronts should include display windows with a sill height of not more than two feet from grade.

(3) Surface detailing should be integral with the structure rather than applied for decorative purposes.

(4) Exterior mounted mechanical and electrical equipment should be architecturally screened,

D. Signs and parking.

(1) Recommended sign material is wood.

(2) Recommended store signage is black capital letters applied to a white fascia wood trim over the display window area. Letter size should be indirect or external to the sign.

(3) The design of a sign should be subservient to and consistent with the building it serves.

(4) Where a building requires several different signs, they should be similar in size, materials, color and lighting.

(5) Separate parking areas should be linked where feasible.

E. Color.

(1) The painting of buildings in bold colors, patterns, checks or the use of buildings as signs is discouraged.

(2) Only earth tones should be used for exterior surfaces (browns, beiges, grays, soft greens). Accent, or complementary colors, harmonizing with the main color may be used for trim or awnings.

F. Street furniture and lighting.

(1) Recommended street furniture designs and preferred lighting standard should be selected by the Planning Board.

(2) The design of all street furniture (benches, phone booths, trash receptacles, etc.) should be consistent with the overall building design concept.

APPENDICES

VOLUME 6

BRIDGEWATER TOWNSHIP REGIONAL CENTER MASTER PLAN ELEMENT

Somerset County Regional Center

Strategic Master Plan

THE
REGIONAL
CENTER
BRIDGEWATER • RARITAN • SOMERVILLE
A partnership for a better tomorrow
IN SOMERSET COUNTY, NJ

Saltel Consultants

November 2006

SOMERSET COUNTY
REGIONAL CENTER STRATEGIC PLAN

PREPARED BY

Saltel Consultants
4 Combs Hollow Road
Mendham NJ 07945

ACKNOWLEDGEMENTS

Bridgewater Township Mayor and Council

Bridgewater Township Planning Board

Raritan Borough Mayor and Council

Raritan Borough Planning Board

Somerville Borough Mayor and Council

Somerville Planning Board

Somerset County Board of Chosen Freeholders

Somerset County Planning Board

Regional Center Partnership

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EXECUTIVE SUMMARY

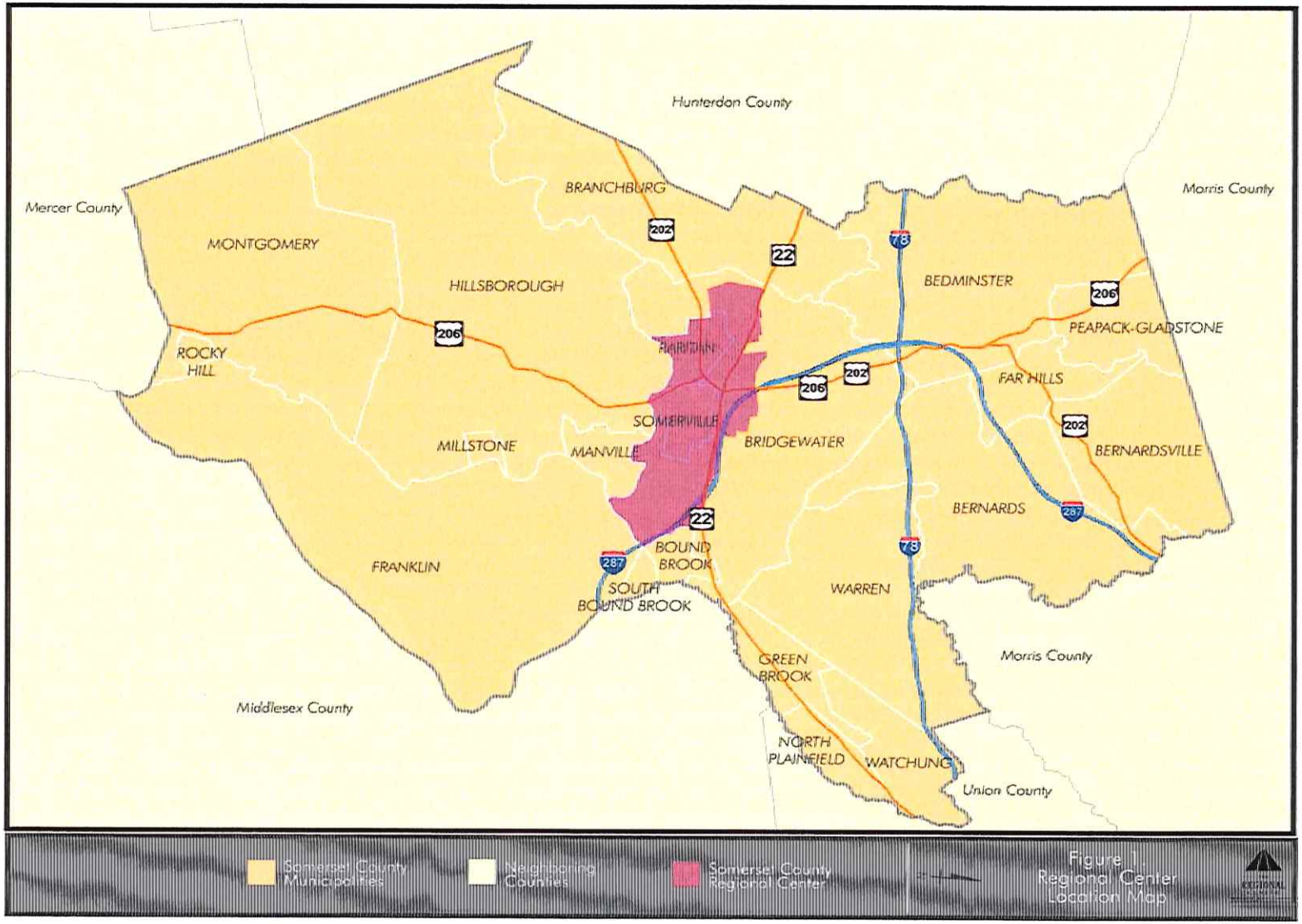
Introduction

Located at a major crossroads at the edge of the New York City/Northern New Jersey metropolitan area, the Somerset County Regional Center is a major focus of residential, business, and retail development within Central New Jersey and is home to most of Somerset County's major institutions. This document represents the latest step in a unique regional planning process that is resulting in many tangible benefits for the three communities that constitute the Regional Center: Somerville Borough, Raritan Borough, and part of Bridgewater Township identified herein as the "Bridgewater Core". The Regional Center Partnership, an organization consisting of stakeholders from all three municipalities and regional business leaders, has led this process as well as many other initiatives.

Somerset County Regional Center

Regional Center Partnership Planning Retreat, June 2005

This document, which lays out the next steps for the Region's future, is based directly on a public process of working with stakeholders to determine the most important programs and projects that will help achieve the Regional Center vision. The recommendations and implementation strategies contained in this report reflect extensive work that has been contributed by residents, business leaders, and elected officials through public meetings, workshops, a community questionnaire, and stakeholder interviews


Hunterdon County
Mercer County
Morris County
Middlesex County
Union County
BRANCHBURG
MONTGOMERY
HILLSBOROUGH
BEDMINSTER
PEAPACK-GLADSTONE
ROCKY HILL
FAR HILLS
SOMERVILLE
MILLSTONE
MANVILLE
BRIDGEWATER
BERNARDSVILLE
BERNARDS
BOUND BROOK
FRANKLIN
SOUTH BOUND BROOK
WARREN
GREEN BROOK
NORTH PLAINFIELD
WATCHUNG
202
22
206
78
287
Somerset County Municipalities
Neighboring Counties
Somerset County Regional Center
Figure 1
Regional Center Location Map

Key Components of the Strategic Plan

This Strategic Plan includes twelve major components. First, important background information about the planning and implementation process leading up to this Strategic Plan is provided. Next, a vision of the Regional Center 20 years in the future is presented. This is followed by the identification of the major opportunitites and constraints facing the Regional Center. The key planning issues for the Regional Center are then presented. They include: land use, development activity, community design, infrastructure, housing, circulation, environmental resources, recreational opportunitites, community facilities, historic resources and cultural resources. Next the goals and objectives for this Strategic Plan are identified. These are presented around seven major focus areas which form the basis for this Strategic Plan: The seven focus areas include: downtowns and mains streets; redevelopment areas, economic development and community design; train station areas; neighborhoods and housing; circulation; recreation, open space and natural systems; and shared services, community facilities, and historic and cultural resources.

The next three components of the Strategic Plan are among the most important. First, a summary of the action strategy which provides an overview of the major recommendations of this Strategic Plan is presented. This is followed by a detailed discussion about the Strategic Implementation Plan recommendations. The programs, policies, responsible agencies, schedules and funding sources for all recommended implementation strategies are identified and grouped according to the seven major focus areas noted above. These recommendations are then summarized and presented in an Implementation Plan agenda matrix.

The next important component of the Strategic Plan is a detailed analysis of land uses and zoning along the municipal borders between Bridgewater, Raritan and Somerville. This is followed by the identification of joint planning opportunitites at key locations within the Regional Center and along municipal borders that focus on how to strengthen the connections between the communities, foster new partnerships and/or resolve existing land use conflicts. The next major component of this Strategic Plan is the presentation of indicators and targets that can be used by the communities to evaluate the progress in achieving the various goals and objectives recommended here. Lastly, updating this Strategic Plan and the relationship of it to other plans and planning initiatives is detailed.

Also, included in this Strategic Plan as Appendix 1 are a series of natural and cultural resource inventory maps which provide important information about environmental features including: land use/land cover; open space/conservation lands; flood prone areas; soils; freshwater wetlands and groundwater recharge.

Key Recommendations of the Strategic Plan

This Strategic Plan recommends that specific implementation strategies be pursued in each of the seven major focus areas. The recommendations for each focus area are summarized here.

Downtowns and Main Streets: Continue to promote the revitalization of each downtown and Main Street area through planning initiatives, and special financing and business assistance mechanisms.

Downtown Somerville

Redevelopment Areas, Economic Development and Community Design: Ensure that redevelopment areas are redeveloped with the following key principles: Utilize the redevelopment process to encourage economic development and desirable reuse of former brownfield sites; ensure that redevelopment areas, whenever possible, are tied closely to the fabric of existing downtowns and Main Street areas; provide public access through each redevelopment area and connections to all greenways and open space; and ensure that redevelopment planning takes into account the community context of each site and provides connections to the surrounding neighborhood.

Train Station Areas: Promote increased ridership and reduced traffic congestion and parking impacts at train stations through the use of innovative redevelopment and transportation strategies.

Raritan Train Station

Neighborhoods and Housing: Protect community character by adopting neighborhood plans that address circulation, connections, community facilities, land use, and parks and recreation. Adopt design standards for infill residential development where appropriate. Provide a greater range of housing choices and affordability in the Regional Center.

Ensure that housing and access opportunitites are available for seniors.

Bridgewater Neighborhood

Circulation: Improve the walkability and bicycle-friendliness of the Regional Center through improved design. Reduce congestion on roadways by retrofitting highway corridors, improving access management, and improving traffic signal efficiencies. Reduce speeding through traffic calming measures. Provide an enhanced level of transit service. Provide for goods movement through roadway planning. Encourage a multi-modal system that incorporates all forms of motorized and non-motorized movement.

Recreation, Open Space and Natural Systems: Acquire land for the Raritan River Greenway and develop the greenway for public access with strong connections to the Regional Center's neighborhoods, central areas, local greenways, conservation areas and open space. Improve environmental regulations, including storm water management techniques, and incorporate best management practices.

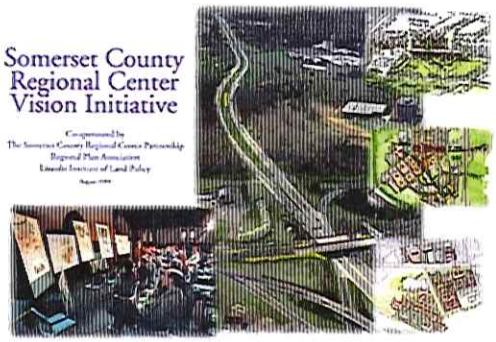
Peters Brook Greenway

Shared Services, Community Facilities, Historic and Cultural Resources: Explore the possibilities for shared service agreements in parks and recreation and other areas such as public works, administration, and public safety. Develop regional community facilities and services to promote recreation and cultural activities. Encourage preservation and use of historical resources.

ABOUT THE PLANNING PROCESS AND IMPLEMENTATION

In 1996, the Regional Center became the first multi-jurisdictional region to receive "center designation" from the New Jersey State Planning Commission. Since the designation, the boundaries of the Regional Center have been altered to respond to new local priorities regarding development and redevelopment. The current boundaries include all of Raritan, all of Somerville and the "Bridgewater Core" area which includes the Bridgewater Commons, the 6th Avenue Redevelopment Area, the Bridgewater municipal complex and Somerset Corporate Center. A graphic depiction is provided in the following Figure 2 Regional Center Base Map.

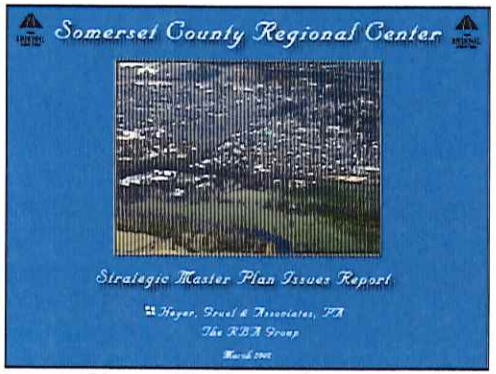
The foundation for this Strategic Plan was laid in 1999, when a five-day workshop was held to develop a unified vision for the Regional Center. That vision addresses design, transportation, and policy to create a consensus image of the Regional Center 20 years into the future. This Strategic Plan represents the next step in bringing the workshop's vision into reality.



Regional Center Vision Initiative, 1999

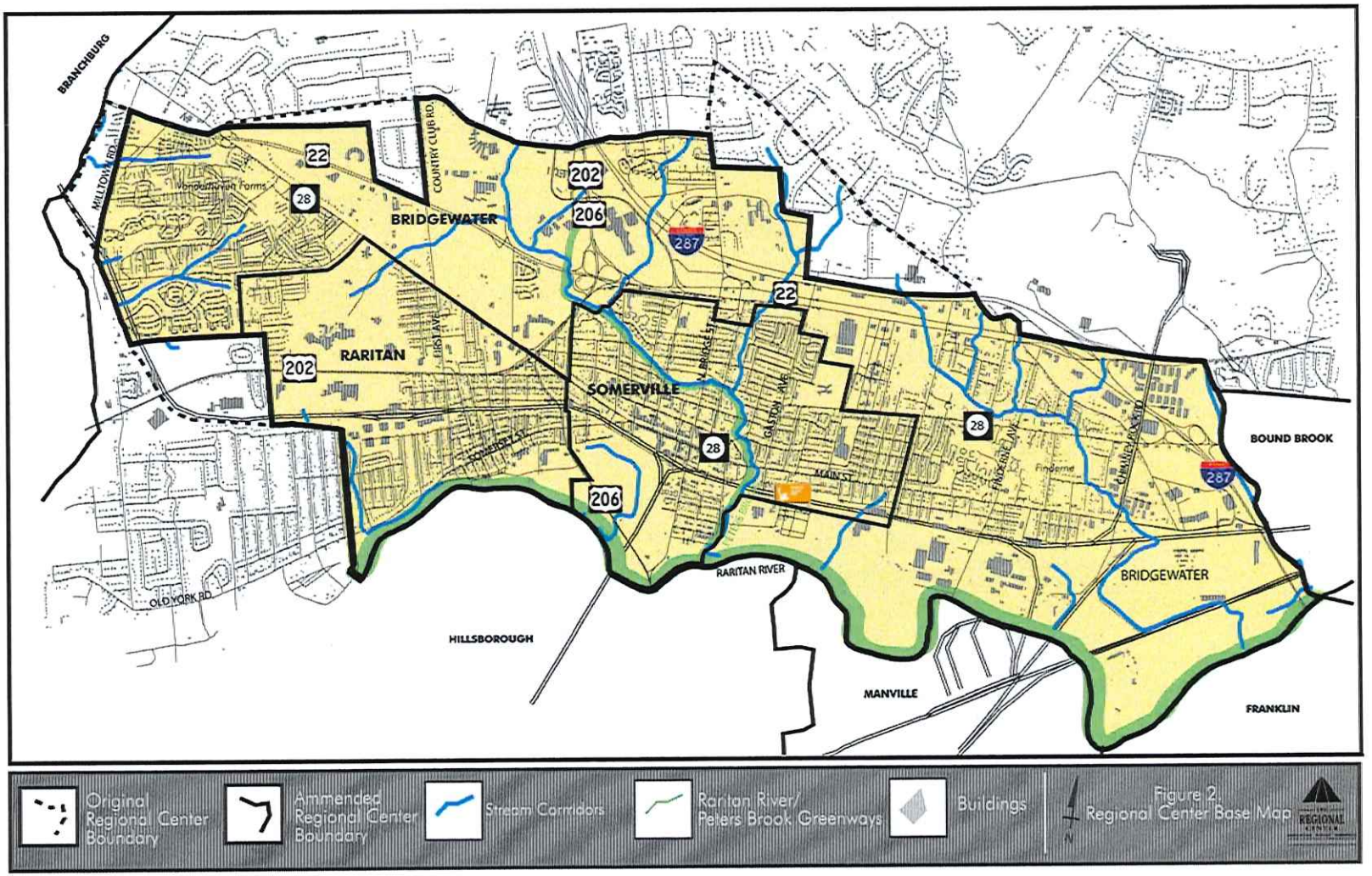
The strategic planning process has involved multiple stages. The initial phase consisted of an extensive and multifaceted public participation process over a six month period. The process included a community questionnaire, public meetings/workshops, stakeholder interviews and the Regional Center Partnership website.

A Strategic Master Plan Issues Report released in March 2002 revisited the vision and recommended some modifications. The twelve major issues detailed in the 2002 Issues Report included: land use, circulation, parks, open space & recreation, community design, conservation, housing, redevelopment, economic development, quality of life/neighborhoods, community facilities, cultural resources and policy.



Strategic Master Plan Issues Report, March 2002

The next phase in the strategic planning process included working with the Regional Center communities to develop the


BRANCHBURG
MILLTOWN RD.
COUNTRY CLUB RD.
22
28
202
206
287
BRIDGEWATER
RARITAN
FIRST AVE
SOMERVILLE
W. BRIDGE ST.
GAST AVE
MAIN ST.
FINDERNE AVE
ANNWELL RD.
BOUND BROOK
OLD YORK RD.
HILLSBOROUGH
RARITAN RIVER
MANVILLE
FRANKLIN
Original Regional Center Boundary
Ammended Regional Center Boundary
Stream Corridors
Raritan River/ Peters Brook Greenways
Buildings
N
Figure 2: Regional Center Base Map

Regional Center Strategic Draft Plan in November 2002. This plan addresses broader Regional Center issues and recommends implementation agendas for the Regional Center as a single entity. Seven major focus areas for future planning attention are proposed and include: downtowns and main streets; redevelopment areas, economic development and community design; train station areas; neighborhoods and housing; circulation; recreation, open space and natural systems; and shared services, community facilities and historic and cultural resources.

It was the intent to complete this plan in coordination with development of local Regional Center Plan Elements for each Regional Center community. The local Plan Elements are intended to address the more local specific issues, goals and objectives, policies, action strategies and implementation agendas, in coordination with, and supportive of, the overall Regional Center Strategic Plan. To date, local Regional Center Plan Elements have been adopted in both Raritan and Bridgewater. Somerville Borough is in the process of finalizing their Regional Center Plan Element.

In June 2005 the Regional Center Partnership hosted a planning retreat to chart a New Action Agenda. Workshop participants identified a number of new opportunitites and strategies for future joint planning initiatives. In addition, six new functions for the Regional Center Partnership to move forward on were identified. They included: providing technical assistance; planning studies; communication; coordination; funding and education for the Regional Center communities.

Regional Center Retreat, June 2005

Following the retreat, the decision was made to revisit the Regional Center Strategic Draft Plan. The purpose of the review was to update the plan, confirm priorities and add some new important sections including a detailed analysis of land uses and zoning along the municipal borders and recommendations about joint planning opportunitites.

The release of this updated Regional Center Strategic Plan culminates the planning process by confirming the recommendations and implementation strategies for the entire Region. The process does not end here. For each implementation strategy included in this report, an agency, schedule and funding source are identified. Those agencies, including the Regional Center Partnership, State, County, and municipal governments, will use the projects and programs identified here to bring the vision into fruition.

VISION

Over the next twenty years, the Regional Center will be gradually redesigned to repair natural and manmade connective systems, improve the built environment, sustain residential neighborhoods, and enhance community life.

The Regional Center's location alongside the Raritan River and amid numerous streams provides a unique opportunity to increase human contact with water. The Regional Center will protect and restore its riparian ecosystems and will simultaneously provide access to the water for its human inhabitants. Waterways will connect communities as corridors for the movement of people. They will connect the Region to its past by improving access to and knowledge of historic sites. Their role as place of migration and interaction for plant and animal species will be restored.

Raritan River

The Regional Center will provide a robust, multi-modal network of transportation options that facilitate the movement of its entire people. Strategic roadway improvements will reduce traffic congestion, diminishing the amount of time that individuals must spend in their cars. A new network of paths and trails will make walking and bicycling viable for larger segments of the population. Redesigned streetscapes on both main streets and state highways will provide a pleasing aesthetic experience for travelers in cars and buses, on bicycles, and on foot.

Route 22 Pedestrian Bridge, Somerville-Bridgewater

Appropriate space will be allotted in the Regional Center's circulation network to all modes of transportation. People will feel safe walking to commercial uses, schools, and their neighbor's homes. Bicycling along the Raritan River and along streets will be safe and common. New developments of office

parks and retail shopping areas will be walkable and served by mass transit. Trucks will use appropriate roadways, and will be directed away from residential areas. Traffic calming measures and vehicular circulation will be designed to provide a safe pedestrian environment. Frequent mass transit service will allow for better access throughout the Regional Center.

The adaptive reuse of existing buildings and places will foster a heightened sense of community throughout the Regional Center. New infill development and redevelopment of vacant sites will strengthen downtown Somerville and Raritan, making them even more desirable places to live, work, and play. In Bridgewater, the Finderne Main Street area will be revitalized and the designs of corporate campuses, shopping centers, and office parks are altered to improve their connections to other parts of the Regional Center.

Downtown Raritan

The Regional Center will continue to offer high quality employment opportunities, hosting a large variety of major corporations and a multitude of local and regional businesses. Major employment, office and business uses and retail opportunities will concentrate in this area. Large scale business uses will continue to be concentrated along the major highway corridors (Routes 22, 202 and 206) and within the "Golden Triangle" area of Bridgewater Township - an area which currently includes the Bridgewater Commons, Somerset Corporate Center, Bridgewater Marriott Hotel and Bridgewater Crossings.

Marriott Hotel, Bridgewater

The downtowns of Raritan and Somerville will see new business growth, brownfield and grayfield redevelopment and economic revitalization appropriate to the historic characters of these areas and compatible with surrounding neighborhoods. The Regional Center's downtowns, Main Streets and train station areas will be vibrant places of commerce,

entertainment, housing, and work. Downtown Somerville and Raritan, and the Finderne CDB area will be revitalized and enhanced by facade and streetscape improvements. Train stations and the surrounding areas will become focal points within the community centers thus increasing transit ridership.

Residential neighborhoods throughout the Regional Center will be strengthened as the heart of the community. New neighborhood plans will ensure that physical changes to the neighborhoods will be thoughtful and will respect the character of these communities. Streets and pathways, which constitute much of the public space in these neighborhoods, will be enhanced. New, safer connections for cars, bicycles, and pedestrians will ensure the harmonious coexistence of multiple users of the neighborhoods' public space.

Southside Neighborhood, Somerville

The Regional Center will continue to be a place of innovative cooperation between its member municipalities. The municipal and county governments will continue to seek out and implement ways to share services and facilities, thereby achieving higher levels of service to residents at a lower cost than they could achieve on their own. A joint community center may be developed to provide recreational, artistic, and cultural opportunities within the Regional Center. Lastly, historic resources will be preserved and better appreciated and understood by future generations.

OPPORTUNITIES AND CONSTRAINTS

Competitive Strengths

- The Regional Center is highly successful as a retail destination. Downtown Somerville and Raritan have been revitalized over the last decade and have become renowned for their restaurants and shopping. The Bridgewater Commons Mall has retained its position as the preeminent shopping center in Central New Jersey.

- Housing and office growth have continued at a rapid pace over the last decade, confirming the Regional Center's desirability as a place to live and work.

- Vacant and underutilized land, including many brownfields and grayfields sites, at strategic locations in Somerville and Raritan, and along highway corridors gives the Regional Center a wealth of opportunities for future growth.

- The Regional Center has superior transportation connections to the New York, New Jersey, and Philadelphia regions. Well-established highway and rail networks give residents and businesses options for making connections to the broader region.

- Three train stations give residents of the Regional Center easy access to New York and other destinations in Northern New Jersey and provide Regional Center employers with access to a broader work force than is available locally. The stations also provide key focal points for transit-oriented redevelopment that can help to reduce the Regional Center's reliance on the automobile and provide alternative living options.

- The presence of the Raritan River gives the Regional Center an identifying landmark and ready access to unique natural environments. The river's many tributaries provide opportunities for re-connecting Regional Center neighborhoods with greenways to enhance the quality of life.

- The Regional Center has a strong core of established neighborhoods. The sense of community in the neighborhoods forms a solid basis for future planning and helps to ensure the continued viability of these residential areas.

- The long history of cooperation among the Regional Center's three constituent municipalities has given the Regional Center a legacy of mutual trust that provides a platform for even greater cooperation in the future. Governments in the Region have shown a willingness to work together that is unmatched in New Jersey, resulting in enhanced services at a lower cost for residents and businesses.

Obstacles

- Getting around the Regional Center is frustrating for drivers stuck in congestion and can be nearly impossible for those without cars. Road congestion and traffic volumes have increased beyond the design capacity of the highways. The Center must find ways to provide more transportation options within the context of its well-established low-and-moderate-density overall development patterns.

- Many commercial and industrial sites within the Regional Center constitute potential brownfield and grayfield sites. While offering opportunities for growth, these sites also require special attention if they are to be redeveloped in a manner that compliments the surrounding area. Strategies are needed for re-using these sites in a way that enhances community life.

- The Regional Center's train stations generate considerable automobile traffic from commuters, which creates congestion within neighborhoods surrounding the stations. New transportation options are needed to reduce congestion around train stations.

- Sprawling growth within the Regional Center has led to an increased reliance on the automobile and longer distances between home, work, and shopping. Compact models of development are needed to provide alternative approaches for short term growth and, in the long run, to retrofit existing areas of commercial sprawl.

- Strategies are needed for coordinating the replacement and expansion of numerous community facilities within the Regional Center. The initial siting and subsequent expansion of some facilities has led to impacts on neighborhoods and reduced access.

- Brownfield sites limit access to the Raritan River waterfront. The Regional Center must identify strategies and funding sources for cleaning up these sites and reusing them in appropriate ways.

- As the Regional Center and surrounding areas continue to develop, pressure to increase the intensity of development in established residential areas will increase. Strategies are needed for ensuring that infill development, even when proposed at higher densities, is well designed and compatible with existing residential neighborhoods.

- The Regional Center includes three municipal governments, two school districts, and a regional sewerage authority. Federal, State, and County agencies also have jurisdictional authority. The large number of agencies in the Region poses an obstacle to efficient decision making and service delivery.

KEY ISSUES

Land Use

A variety of land uses exist in the Regional Center, as depicted in the following Figure 3 Regional Center Generalized Land Use Map. A significant portion of the Regional Center is comprised by residential uses. Much of this residential is located adjacent to key commercial areas including downtown Raritan and Somerville, the Bridgewater Commons Mall and the Finderne Avenue commercial area. In addition, many residential areas are bisected by major roadways with commercial uses along their frontage such as Routes 22, 28 and 202 and Somerset Street in Raritan.

Residential Land Uses, Somerville

Industrial uses dominate the south west and south east portion of the Regional Center and include key sites such as Johnson Drive, National Starch, BRI Recycling and Wyeth. A number of these sites are brownfield sites proposed for redevelopment.

Also located in this area in Bridgewater are the Promenade Mall and the Commerce Bank Ball Park, which is an important recreational resource for the Region. The Torpey Athletic Complex is another main recreational resource located adjacent to the Raritan River. Other parks and open space areas are located throughout the Regional Center. Greenways, such as Peters Brook corridor, provide important connections between neighborhoods and key sites

Commerce Bank Ball Park, Bridgewater

Institutional and government uses, like the Somerset Medical Center, Bridgewater High School and Somerset County offices, are located throughout the Regional Center.

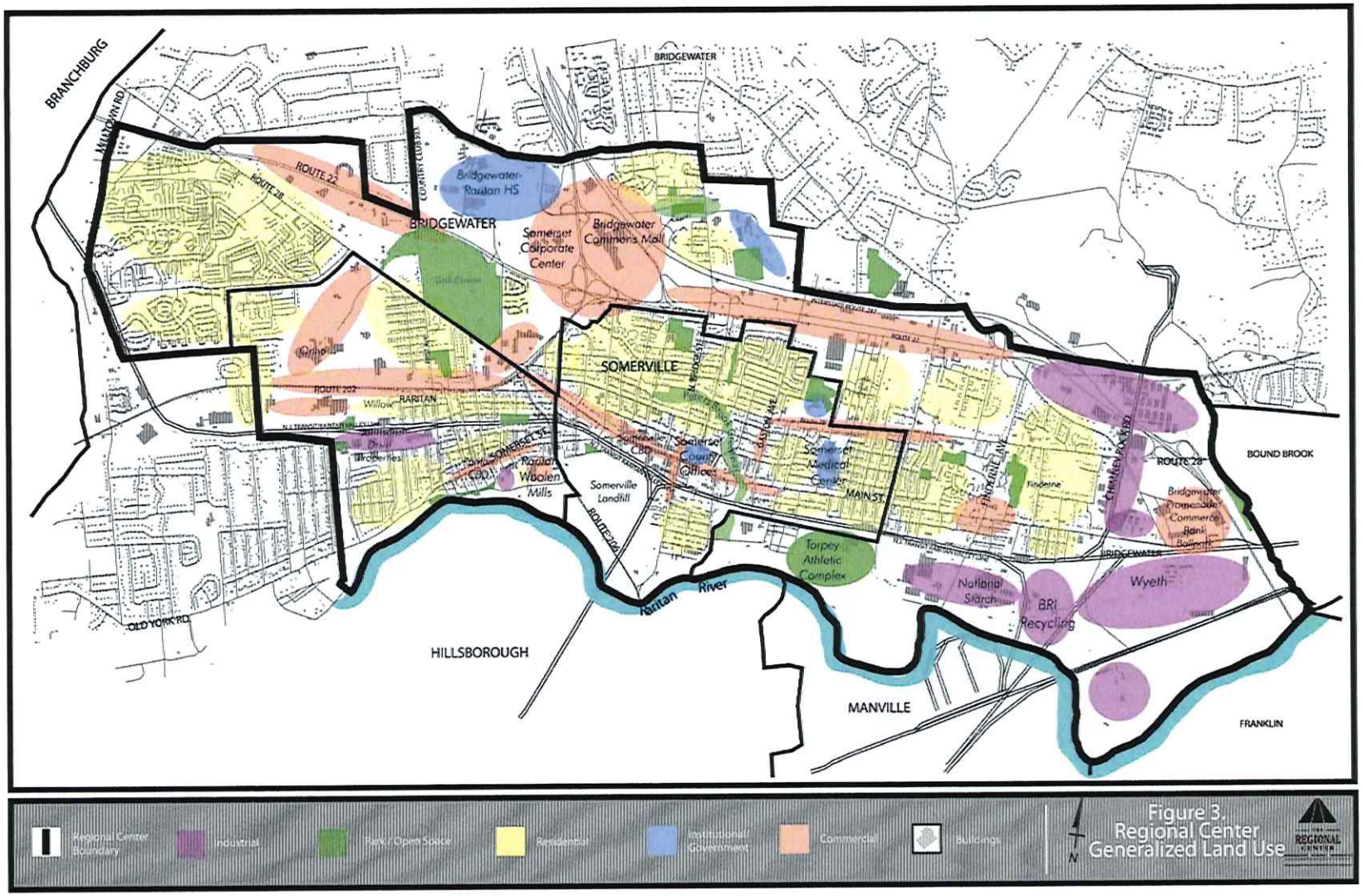


Figure 3.
Regional Center
Generalized Land Use

Bridgewater, Raritan and Somerville face very similar issues as a result of the existing common land use pattern. A key challenge in all the communities is preserving the character of existing residential areas from nearby commercial and industrial uses. Another shared challenge is integrating important government and institutional uses into existing neighborhoods. The most common land use issue in the Regional Center continues to be traffic congestion and circulation issues. Access within and through the Regional Center remains a top planning priority by all three municipalities. Another common land use issue shared by the communities is enhancing access opportunitites to the Raritan River and other important open space and natural areas.

Raritan Power Canal Pedestrian Bridge

This strategic plan recommends a number of opportunitites for the communities to work together to resolve common land use issues. One key opportunity is undertaking joint neighborhood plans. These plans could recommend ways to enhance buffering between conflicting uses such as residential areas that are located adjacent to either commercial uses or industrial sites. Joint neighborhood plans could also provide recommendations on how to better integrate institutional uses within residential areas and enhance linkages to open space areas and recreational sites. The Regional Center communities should also work on joint studies that examine the major connectors between the towns and neighborhoods including major corridors and greenways.

Development Activity

The Regional Center has experienced a high level of residential and commercial development activity during the last decade. This activity includes residential subdivisions, residential infill, and office and commercial development. New developments in Bridgewater have been constructed on previously vacant and underutilized land in the Bridgewater Core, the West Gateway, and the East Gateway. In Somerville and Raritan, downtown revitalization has resulted in increased commercial and office activity. The build-out of prime development sites is forcing developers to look at more challenging locations, both inside and outside the Regional Center.

Residential Development

Most of the Regional Center developed as a suburban bedroom community on the edge of the New York, Newark, and New Brunswick metropolitan areas, with much development occurring in the early to mid 20th century. More recently, substantial multifamily development has occurred on

remaining vacant lands in western Bridgewater. The residential areas of the Center are essentially built out, with no large tracts of unconstrained land remaining for large-scale residential development. Raritan, Somerville, and, to a lesser extent, Finderne, all have areas of relatively dense housing in compact grid forms. The rest of Bridgewater consists mainly of low-density residential development with a rural-suburban character as well as higher density multi-family housing also with suburban characteristics.

Suburban Residential Development, Bridgewater

Since the 1980s, there has been an increased demand for housing in the area as a result of extensive office development in Bridgewater as well as the increase in County government facilities in Somerville. As most residential lands are currently built out, development pressure on existing low-density developed sites is increasing. There are also increasing pressures and opportunities for new residential development as former brownfield sites are developed with higher density residential units in stand-alone or mixed-used projects.

The pressure for infill development presents opportunities to redesign communities so that they are more functional, but it also brings potential problems such as increased traffic and a loss of open space. The Regional Center is faced with the challenge of balancing the goals of providing more housing while preserving the area's existing suburban character.

Residential Infill, Somerville

The Regional Center Partnership and its stakeholders have expressed a strong desire to promote neighborhood plans in established residential areas of Bridgewater, Somerville, and Raritan. These neighborhood plans will guarantee that important issues such as community design, circulation, parks, recreation, community facilities, and connections to other parts of the Regional Center are addressed.

Nonresidential Development

The Regional Center is home to extensive commercial, office, industrial, and government development. Changes in nonresidential development patterns have occurred in recent years. Retail development, for example, changed dramatically in the 1980s when the Bridgewater Commons Mall opened, and it changed again in the late 1990s when big-box superstores were constructed on former industrial and office sites in eastern and western Bridgewater. These developments have altered how area residents shop and have created shifts in traffic patterns which impact the area's roadways.

Grocery Store, Bridgewater

Government and hospital operations have steadily expanded in Somerville, leading to concerns about the erosion of the tax base there. In Bridgewater and Raritan, meanwhile, large industrial properties have become vacant or underutilized. On some sites new industrial uses have been found for old buildings. For other sites, such as the Wyeth site (American Cyanamid), also located in the East Gateway, substantial cleanup and large-scale redevelopment planning will be needed.

Wyeth Site (American Cyanamid), Bridgewater

One of the most significant changes to occur recently in the Regional Center is the explosion of office development in Bridgewater, which was traditionally a residential and industrial suburb. The Somerset Corporate Center has brought substantial new office development into the Region, which, like the retail development that preceded it, has created major shifts in traffic patterns. A major challenge in the Regional Center is how to accommodate new nonresidential development without creating more traffic and congestion and negatively impacting residential developments.

Redevelopment Issues

New development in all three towns is expected to be primarily accommodated via redevelopment and rehabilitation. This is due in part to larger economic trends and the fact that the

Regional Center area is essentially built out. The Regional Center has a large concentration of industrial space, much of it vacant. Redeveloping these areas is and will continue to be a key common planning challenge. As depicted in the following Figure 4 Regional Center Redevelopment, Economic Development, & Community Design Areas Map, each community has a number of key sites proposed for redevelopment.

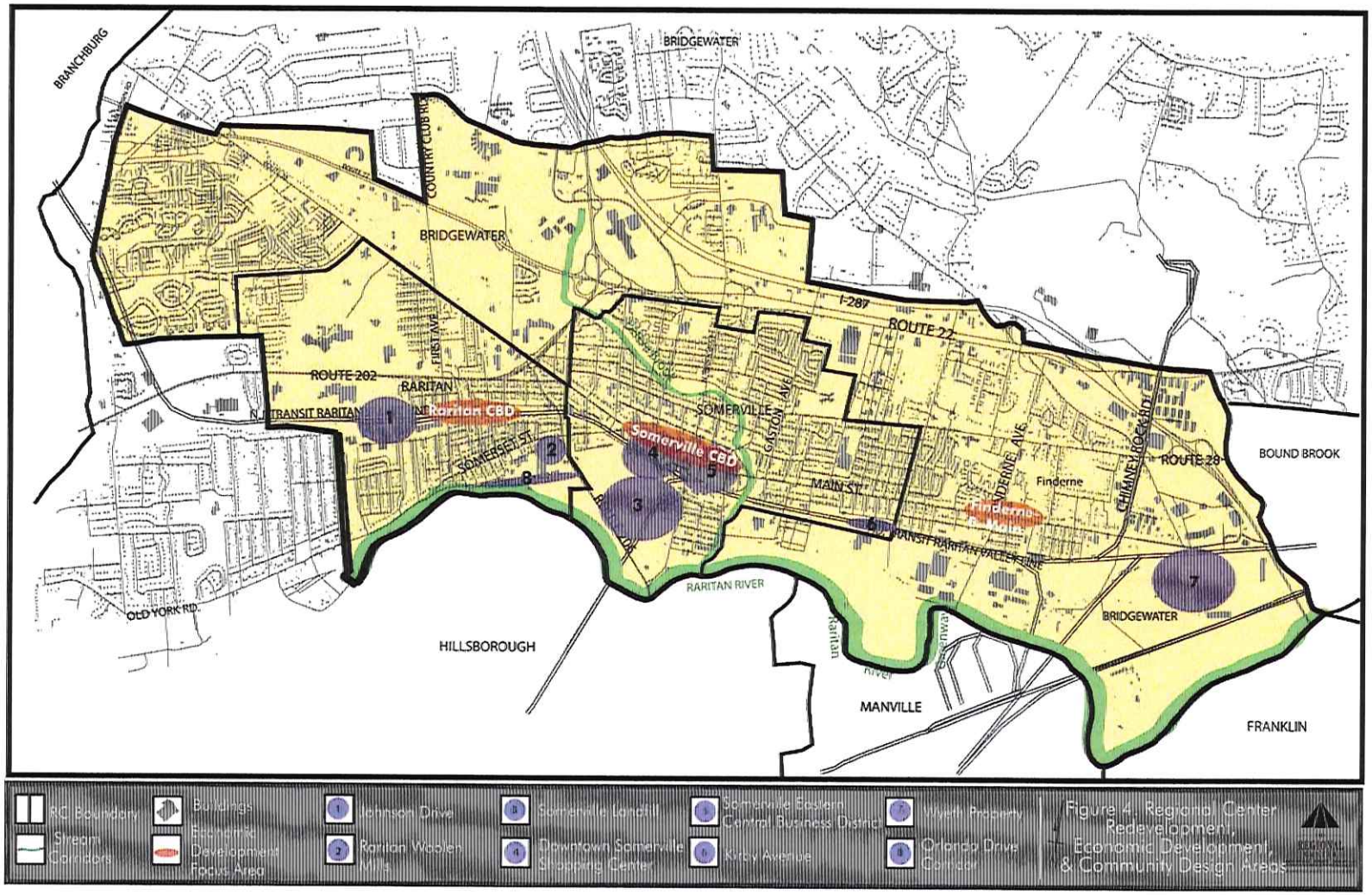
Demolition and Infill, Somerville

Raritan has already begun this process with the redevelopment of the Raritan Woolen Mills. The Borough amended their zoning to permit development of high-density multi-family housing on this site, which includes a low-and-moderate income housing component. Redevelopment is underway for this key infill site in a manner that will compliment downtown needs, while promoting high-quality community design.

Redevelopment, Raritan Woolen Mills Site

However, many other industrial sites remain in the Borough, particularly along Orlando Drive. Deciding if and how this corridor could be transformed is the focus a study being performed concurrently with this plan. The Johnson Drive corridor area is also likely to be redeveloped in the future with new uses appropriate for the area.

Orlando Drive, Raritan


BRANCHBURG
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COUNTRY CLUB RD
BRIDGEWATER
I-287
ROUTE 22
ROUTE 202
RARITAN
FIRST AVE
N. TRANSIT RARITAN
Raritan CBD
SOMERSET ST
Somerville CBD
SOMERVILLE
GAston AVE
MAIN ST
Finderne
FINDERNE AVE
CHIMNEY ROCK RD
ROUTE 28
BOUND BROOK
TRANSIT RARITAN VALLEY LINE
RARITAN RIVER
OLD YORK RD
HILLSBOROUGH
BRIDGEWATER
MANVILLE
FRANKLIN
RC Boundary
Stream Corridors
Buildings
Environmentally Sensitive Development Focus Area
1 Johnson Drive
2 Raritan Woolen Mills
3 Somerville Landfill
4 Downtown Somerville Shopping Center
5 Somerville Eastern Central Business District
6 Kirby Avenue
7 Wyeth Property
8 Orlando Drive Corridor
Figure 4: Regional Center Redevelopment, Economic Development & Community Design Areas

Similarly, Somerville is currently actively planning for the redevelopment of four key areas - the Landfill, Downtown Somerville Shopping Center, Eastern Central Business District and Kirby Ave. Redevelopment area, which is bound by the NJ Transit right-of-way to the south, Loeser Ave. to the west, Fairview and Kirby Avenues to the north and Adamsville Road to the east. While the Borough has particular goals specific to each redevelopment area, they are cognizant of the interrelationships between them and are taking steps to incorporate each redevelopment area into the larger planning framework for the municipality as a whole.

Somerville Landfill Site, Somerville

Bridgewater, too, is tackling the issue of deciding how to best reuse former industrial space. The large Wyeth site is a prime example. Although redevelopment of this site is not expected for several years, the municipality is currently actively involved in the long-term plans for the redevelopment of this important site.

Wyeth Site, Bridgewater

These redevelopment opportunitites all have the potential to become a showpiece for innovative redevelopment planning. Together they could transform the Regional Center. Overseeing the planning process for these sites is a major issue facing each Regional Center community.

Community Design

The objective of improving community design is one of the major issues facing the Regional Center over the coming decades. In its function, the Regional Center has changed dramatically since the 1970s. But these functional changes have, for the most part, not been reflected in the Regional Center's approach to physical design. Most new development has continued to occur in sprawling patterns of single-use "pods" for housing, office, or retail, with little mixing or attention to the interrelations between different elements. This

development pattern has resulted in attractive and well-maintained low-density residential neighborhoods throughout the Regional Center, but it is less desirable when it is applied to denser residential developments or to nonresidential projects such as shopping centers and office parks. This current development pattern also serves to limit the potential for providing increased public transit opportunities throughout the Regional Center.

Residential Area, Bridgewater

The challenge for the Regional Center over the coming years is to retrofit existing suburban patterns where necessary while preserving the core central areas of downtown Somerville and Raritan as the primary "centers-within-the-Center." The Route 22 Suburban Boulevard project, the Somerville–Raritan Streetscape Connection, and proposed alterations to campus-style developments along major highway corridors are all efforts to incorporate design changes into the suburban setting of the Regional Center.

Regional Center stakeholders have repeatedly expressed a desire for mixed-use, compact development patterns that permit greater community interaction and reduce the area's reliance on the automobile. Over the long run, opportunities to redevelop existing big-box retail sites, office parks, and regional shopping centers will present themselves as these developments age. The Regional Center communities should be prepared to explore new guidelines as these changing circumstances present themselves.

In the Regional Center's older urban areas, good design will ensure the viability of these areas for years to come. The primary issue currently facing downtown Somerville and Raritan is that of incorporating redevelopment projects within and on the fringes of downtown into the towns' existing urban fabric, while at the same time complimenting and enhancing the historic character and pedestrian environment of these areas. Important principles have been identified for redevelopment projects at the Raritan Woolen Mills, Somerville Landfill and Downtown Somerville Shopping Center sites. These principles should be considered for future projects and include:

- Building design guidelines that compliment the existing structural/historic character of the community.
- Incorporating provisions for public open space as part of redevelopment projects.
- Connectivity to the existing street grid.
- Enhancing pedestrian connections.

- Public connections to the Raritan River and other greenways.
- Encourage strong links to mass transit opportunities where appropriate.

Raritan Woolen Mills, Raritan

Similar design principles should be adopted for proposed train station area redevelopment and for the Wyeth site in Bridgewater. Finally, where not already provided, design standards should be developed for infill buildings constructed within the existing developed areas of downtown Somerville and Raritan.

Infrastructure

The Regional Center is generally well served by water and sewer infrastructure. The largest key issue is determining the capacity of these systems to handle additional growth from redevelopment in Somerville and Raritan. Typically, water and sewer systems in older urbanized areas have sufficient capacity for redevelopment because they were originally constructed to serve large industrial users with much higher demands than commercial and residential users typically have. However, there is a need to conduct capacity studies and review the condition of all existing infrastructure systems.

Housing

The Regional Center has a highly diverse housing stock consisting of single-family homes, condominiums, multifamily garden apartment complexes, and high-rise dwellings. This housing is available in a variety of settings including urban, suburban, and semi-rural locations. Specialized housing for seniors exists as well as low-and moderate-income housing. A major issue facing the Regional Center is ensuring that housing opportunitites continue to be available and affordable for all of its current and future residents.

Moderate-Income Housing, Bridgewater

New housing opportunitites in the Regional Center are expected to be created predominately through redevelopment and infill since most residential lands are currently built out. There are opportunitites for increased residential development as former brownfield sites are developed with higher density residential units in stand-alone or mixed-use projects. The most recent example of this is the proposed redevelopment of the Raritan Woolen Mills site with nearly 200 luxury apartments.

All three Regional Center municipalities have worked over the years to provide an adequate stock of affordable housing. The Council on Affordable Housing (COAH) is the governing body that oversees the management of housing obligations in accordance with New Jersey's regional planning considerations. COAH was established in 1985 as a result of the State Supreme Court's Mt. Laurel decisions. In addition, the state legislature authorized the Fair Housing Act of 1985 which states that "every municipality in a growth area has a constitutional obligation to provide through its land use regulations a realistic opportunity for a fair share of its region's present and prospective needs for housing for low and moderate income families." (N.J.S.A. 52:27 D-301)

The COAH process provides a wide array of benefits for those municipalities that choose to participate in its program. The process offers municipalities flexible options for addressing affordable housing obligations including alternative living arrangements, municipally-supported "all affordable" projects, buy-down of market rate units and Regional Contribution Agreements (RCAs). COAH offers municipalities protection from exclusionary zoning ("builder's remedy") litigation. Municipalities with COAH-certified Housing Plans also qualify for New Jersey's Balanced Housing Fund. All municipalities must obtain Plan Endorsement from the State Planning Commission within 3 years of receiving COAH certification. Municipalities with SPC Endorsement are eligible for priority access to state agency programs, technical assistance and discretionary funds.

Affordable Housing, Somerville

Somerville Affordable Housing

The Borough of Somerville's current affordable housing obligation in its Round 2 Housing Element and Fair Share Plan is 170 units. Somerville also has to address its Round 3 "growth share" affordable housing requirements. The Borough has not yet submitted a draft Round 3 Plan to COAH, which is necessary if it is to remain under COAH's jurisdiction and continue to receive the benefits described above. Somerville

has acknowledged that a reexamination of its affordable housing situation is overdue; officials have indicated that they will be reviewing their affordable housing obligation over the coming year.

Bridgewater Affordable Housing

Bridgewater Township greatly exceeded its Round 2 (1987-1999) affordable housing obligation of 797 units – by supplying 1,170 units during this timeframe. This does not include the reductions and bonus credits that were permitted under the 1995 COAH regulations. The Township met its affordable housing needs primarily through the construction of inclusionary townhouse and condominium style housing developments where 1 unit of affordable to low- and moderate-income households was provided for every market-rate unit built.

Senior Housing, Bridgewater

This increase in housing supply helped to fuel the robust employment growth that took place in Bridgewater during this period. Although Bridgewater exceeded its COAH housing obligation, the community continues to explore opportunities to provide affordable single family units, and housing for the elderly and people with "special needs".

Bridgewater's draft Round 3 Plan includes: continuation of the Housing Rehabilitation Program; transfer of 76 affordable units via a Regional Contribution Agreement (RCA) in the amount of $35,000 per unit to be financed with unused rehabilitation funds and future development fees; funding toward new construction of rental, shared and senior housing; funding for rendering units more affordable; and the purchase of vacant lots for future affordable housing. Bridgewater Township has adopted a development fee ordinance with a revised and updated spending plan consistent with the above. After Round 3, Bridgewater will have 244 remaining credits, 150 of which are rental credits, and 94 of which are general credits.

Raritan Affordable Housing

The Borough of Raritan was granted Round 2 (1993-1999) certification on August 2, 2000. The plan consisted of a request for the continuation of Raritan's vacant land adjustment which was part of a Judgment of Compliance and Repose from the New Jersey Superior Court in 1989. The vacant land adjustment was approved as part of this certification. The Borough's strategy for addressing its obligation included: adoption of a development fee ordinance; provision of 24 new affordable units through inclusionary zoning (to date, 12

affordable units have been provided as part of the Raritan Woolen Mill redevelopment project); 57 units to be addressed, to the greatest degree possible, through overlay zoning; 34 rehabilitated units through the Borough's on-going rehabilitation program and 7 units for alternate living/group home facilities.

Row Homes, Raritan

Raritan Borough has not submitted a draft Round 3 Growth Share Plan/Housing Element to COAH at this time. However, it was one of the first municipalities in the County to adopt and implement a growth share ordinance. This ordinance was applied to a tract of land located at the intersection of Route 202 and First Avenue which yielded 422 newly constructed age-restricted units of which 36 are for low- and moderate-income seniors.

This Strategic Plan recommends that the communities continue to pursue opportunitites to provide new housing that is affordable. One way may be examine the potential for pursuing joint housing such as working jointly on shared Regional Contribution Agreements (RCAs). Other opportunitites may exist to help promote more housing availability and affordability in the Regional Center. In particular, it is recommended that senior housing needs be identified and studied.

Circulation

Roadways

The system of roadways within the Regional Center 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. The Regional Center is at the heart of a hub of major roadways in New Jersey. Interstate 287 and US Routes 22/202-206 all pass through the Regional Center. The road network is completed by State Route 28 and an extensive traditional grid pattern of county and local roads. For a graphic depiction of these roadways please see Figure 5 Regional Center Transportation Facilities Map.

Each of the various roads in the Regional Center is called upon to perform a different type of function in the overall transportation network. For planning purposes, roads are generally classified into three (3) major types: arterial, collector, or local. Each of these types defines a certain range of function.

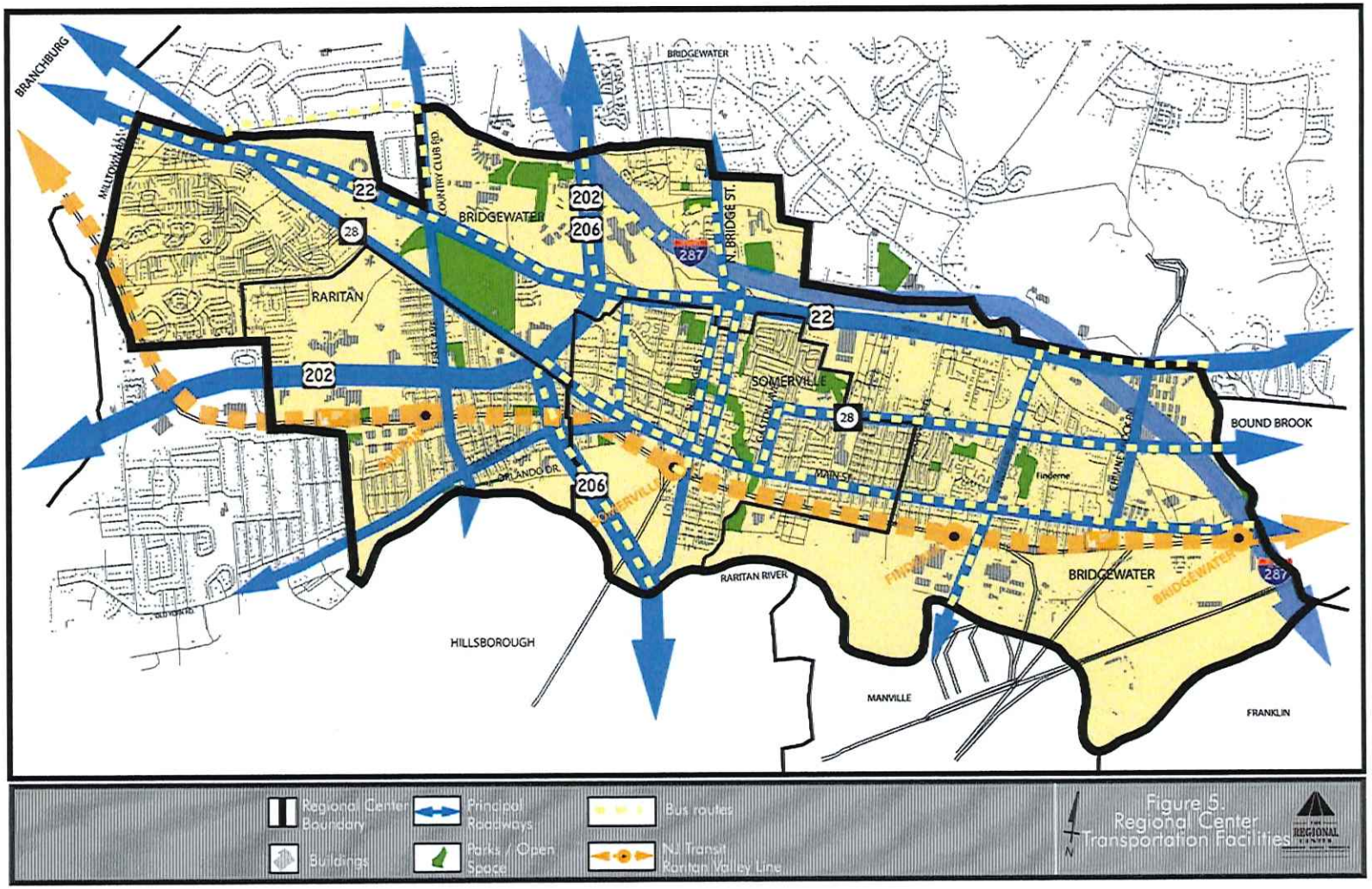


Figure 5:
Regional Center
Transportation Facilities

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.

Arterial Road, N. Bridge Street, Bridgewater

Collector Roads –These are the roads that carry traffic between arterials and local streets and provide access to abutting properties. In the Regional Center, collectors may be 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 then 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.

Local Street, Somerville

The major routes in the Regional Center serve as major through routes in central New Jersey. Route 22 and 202 serve as major east-west connections between Hunterdon, Somerset, and Union counties. Interstate 287 is a major north-south

connection between Middlesex, Somerset, Morris, Passaic, and Bergen counties, while Route 206 provides connections between Mercer, Somerset, Morris, and Sussex counties. Besides being regional through routes, the junction of these routes has a concentration of commercial activity and possesses regional draws such as the Bridgewater Commons Mall and office park development.

Being at the hub of these major routes has provided for rapid regional growth and some of the less desirable factors that accompany it. Road congestion and traffic volumes have increased beyond the design capacity of many of the highways. As these major through-routes have had increases in volume and congestion, so has there been a spill over effect on the local and county roadways within the Regional Center. Increased volumes and congestion on major routes has led to incidences of cut-through traffic on local roads. Local roadways are being used in ways that were not intended by the functional classification of the roadways. Reducing traffic congestion and traffic impacts is a major issue facing the Regional Center.

Access along the major roadways in the Regional Center 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.

Partial Access, Grove Street, Bridgewater

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 urban areas.

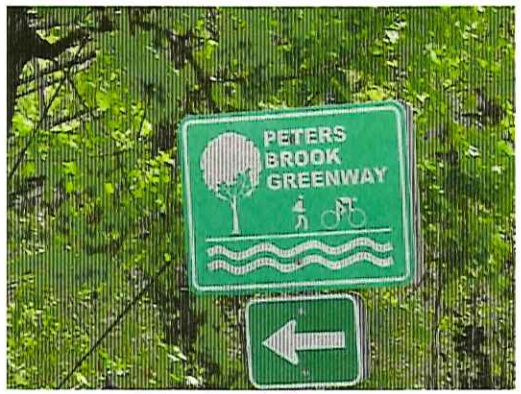
The State Highway Management Act was signed into law on February 23, 1989. Pursuant to this Act, the New Jersey Department of Transportation adopted the State Highway Access Management Code on March 25, 1992. The Municipal Land Use Law requires the contents of municipal ordinances governing subdivision 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.

There are a number of major roadways in the Regional Center where access is an issue. Routes 202, 206 and 22 have many commercial uses on property abutting the roadway. Since these routes were mostly developed prior to NJDOT adopting its highway Access Management Code, driveway connections are frequent. The many driveways and substandard acceleration and deceleration lanes create safety problems and diminish road capacity. Resolving these transportation issues is a major concern to all three communities in the Regional Center.

Bikeways

Bicycling can be a major means of transportation for those who do not possess a license or motor vehicle. Bicycling can provide an attractive alternative to driving, especially considering the unpleasant and frustrating nature of congestion and traffic. It is healthy and relaxing. Providing bicycle facilities would forward the goals of multi-modal transportation and congestion reduction in the Regional Center.



Peters Brook Greenway

Adequate bicycling accommodations provide a transportation option that is both healthy and environmentally compatible. The needs of bicyclists can be addressed through a combination of bicycle compatible roadways and designated bikeways. Bicycle compatible roadways are generally acceptable for experienced cyclists. If bicycling is to be encouraged, it is desirable to provide a network of designated bicycle facilities (bikeways). If dedicated bicycle facilities are provided in a community a broader range of people can make

local trips without being forced to use a car. Some typical bicycle facilities are:

Bicycle Lanes -A bicycle lane is that portion of the roadway designated by bicycle pavement markings and signing for the exclusive or preferential use of bicycles. This is not to be confused with a shoulder, which is separated by a four-inch stripe with no bicycle lane markings. Most shoulders can be used by bicycles, provided that they are wide enough and maintained for safe bicycle use. Auto parking may also be allowed on a shoulder. Recently a hybrid facility, i.e. a shoulder bike lane, has been developed and has been proposed for use on some NJDOT projects.

Bicycle Routes -Bicycle routes are roadways designated for bicycle use through the installation of directional and informational signage. Usually these are low volume roadways, with extra wide curb lanes, provided to give extra room for bicycle operation where there is insufficient space for a bicycle lane or shoulder bicycle lane. A signed connection is a bikeway upon which guide signing is placed to direct bicyclists to a destination or another bikeway. Signed connections are used on local, low-traffic streets and on and around major recreational cycling destinations.

Shared Use Paths -A shared use path is physically separated from motorized vehicular traffic by an open space or barrier. It may be located within a highway right-of-way or on an independent right-of-way. It is not a sidewalk but may be designed to permit shared use. Shared use paths are intended to provide adequate and convenient routes for bicycling, walking and other non-motorized uses. They may be implemented in corridors not well served by the street system.

Currently, the Regional Center does not have a dedicated bicycle network. It is recommended that a bicycle connectivity study to determine origins, destinations, or proper facility combinations be done to determine what improvements are necessary to create a full network of accommodation.

Walking

The pedestrian system in the Regional Center 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 (where people walk most often) generally consist of the minor arterial and collector streets in the Regional Center.

Grove Street Sidewalks, Somerville

Typical pedestrian distances are shorter than vehicle trip distances, and travel distance poses a greater limit on pedestrian travel compared to vehicle travel. Pedestrians tend to seek out the shortest, most direct routes. As a result, the pedestrian network in the Regional Center 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.

Sidewalks are 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 brick pavers. Sidewalks are especially important in densely developed areas, such as town centers or residential developments. They are also important around schools, parks, municipal buildings, and senior citizen housing.

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 the Regional Center a truly pedestrian-friendly community.

The existing sidewalk network in the Regional Center is fairly complex and has many connections, but there are gaps in the system. It is recommended that a sidewalk inventory and community pedestrian demand and needs survey be performed to determine pedestrian facility use and improvement needs.

Goods Movement

Moving freight, like raw materials and finished products, is an area of increasing importance to New Jersey. Businesses, jobs, and consumers all rely on it. The key is to devise regional goods movement strategies that will facilitate the flow of freight and minimize adverse impacts on local communities. A freight movement system includes the highway network, a rail freight network, maritime ports, air cargo facilities, and freight transfer facilities.

BRI Transfer Station, Bridgewater

These 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 is a major user of the transportation network in Somerset County. Because of the County's extensive transportation network and proximity to markets, this industry is key to its economy. Trucks are the dominant mode of freight transportation in Somerset County. However, rail, air and waterborne freight also play a vital role. Goods movement in Somerset County consists of two types: overhead and originating/terminating. Overhead freight only passes through the county, while originating/terminating traffic either begins or ends its trip within the County.

The extensive highway system in Somerset County has been a factor in the amount of truck traffic to and through the area over the last ten years. Trucks have benefited from the technological advances made during the 1970's and 1980's with stronger suspensions, better tires, and light materials, allowing them to transport heavier loads more efficiently. 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.

Public Transportation

The public transportation system in the Regional Center includes a network of bus routes and a commuter rail line. NJ Transit serves the Regional Center for both rail and bus. Most of the existing transportation routes that currently serve the Regional Center are designed to transport residents to and from job locations outside the Regional Center, primarily in the Newark-New York area. For a graphic depiction of the bus route coverage and location of train stations please see Figure 5 Regional Center Transportation Facilities Map.

The Regional Center is served by NJ Transit's Raritan Valley line, which operates between High Bridge and New York City. There are stations in downtown Raritan and Somerville, Finderne and Bridgewater. The Finderne station, which currently has poor pedestrian and no automobile access has been proposed for decommissioning by NJ Transit. The Bridgewater station is located next to the Commerce Bank Ball Park and Bridgewater Promenade has convenient access to I-287. Raritan is the westernmost station for most trains during the week and for all trains on weekends. Service operates every 20 minutes during peak periods and hourly during other times.

Bridgewater Train Station

NJ Transit operates three bus routes in the Regional Center. Route 114 begins at the Bridgewater Commons Mall, serves downtown Somerville, and then terminates at the Port Authority Bus Terminal in Manhattan. The route operates every half hour during peak periods and on Saturdays and hourly most other times. Route 117 operates three eastbound and four westbound trips between downtown Somerville and New York City on weekdays. Route 65/65 operates two eastbound and one westbound trip between the Bridgewater Commons Mall, downtown Somerville, and Newark. It should be noted that Raritan currently has no bus service.

NJ Transit, under the name Wheels, operates the 884 Route between Somerville and Clinton providing 15 weekday trips from Somerville and fourteen trips to Somerville. The route begins at the Somerville train station and runs up Bridge Street to Bridgewater Commons Mall. The Somerset County Office of Transportation runs SCOOT buses that serve Hillsborough, Manville, Somerville, Bridgewater, Montgomery, Rocky Hill, and Bedminster. The service provides twelve daily round trips that serve downtown Somerville and several areas in Bridgewater along its route. Finally there is limited bus service on Susquehanna Trailways that links Somerville with the Lehigh Valley to the west and the Port Authority Bus Terminal.

A key objective shared by the communities is to increase transit ridership throughout the Regional Center. Increased transit usage will result in less cars on the roadways and will decrease traffic congestion and improve vehicular safety. This Strategic Plan includes a number of recommendations to enhance transit ridership. In addition, the plan recommends improvements at train stations to reduce traffic congestion and parking impacts.

Environment Resources

The Regional Center has excellent natural resources as depicted in the following map Figure 6 Recreation, Open Space and Natural Systems. The Raritan River runs adjacent to the Regional Center, and many brooks flow through the Center. Peters Brook has been made into a greenway linking neighborhoods within Somerville and may form the basis for an expanded greenway system to link neighborhoods throughout the Regional Center. The acquisition of additional land for the Raritan River Greenway along both the Raritan and its tributaries is a key issue for the Regional Center.

Raritan River Spillway

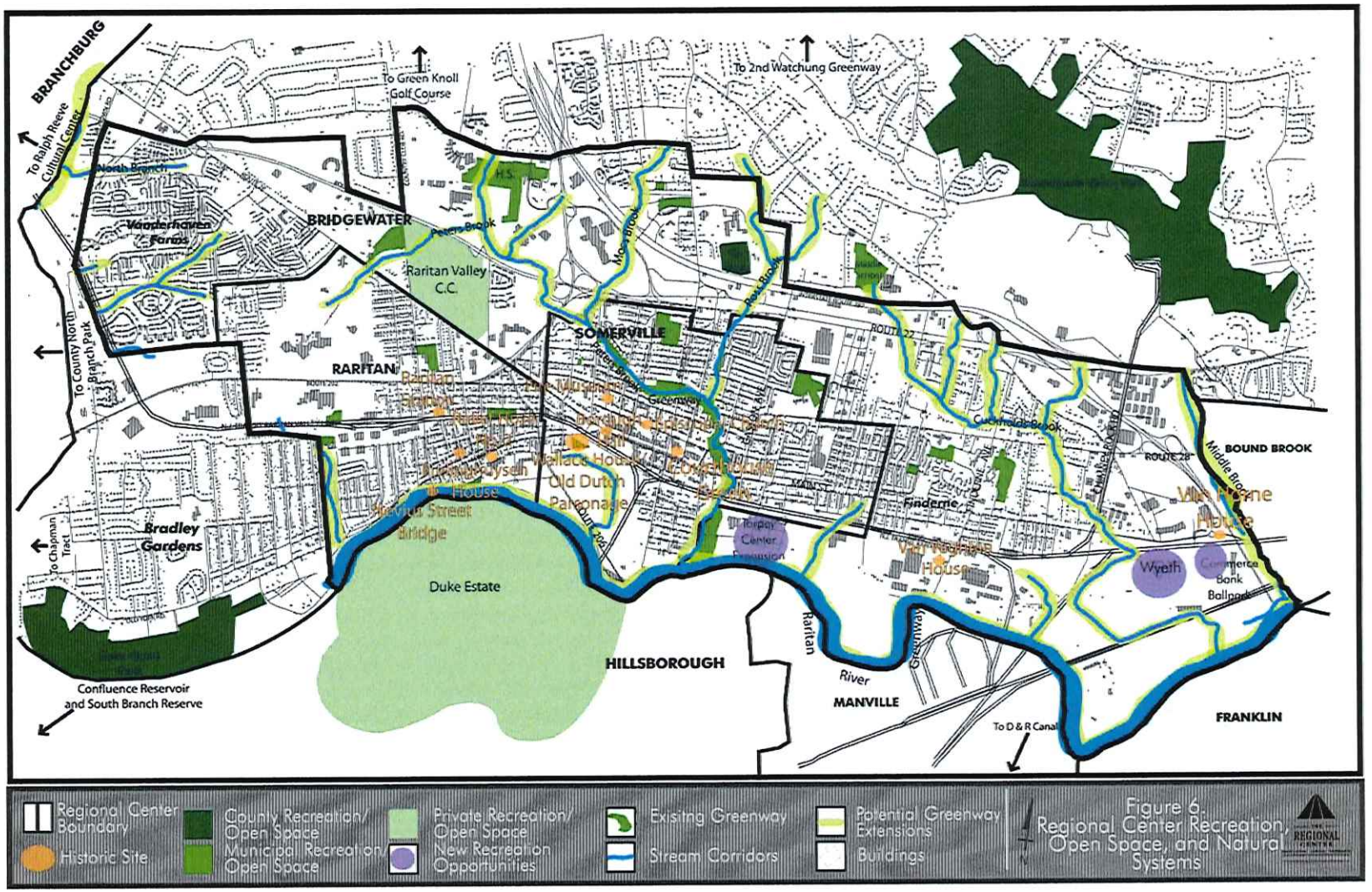


Figure 6.
Regional Center Recreation, Open Space, and Natural Systems

Included in this Strategic Plan as Appendix 1 are a series of natural and cultural resource inventory maps which depict land use/land cover, open space/conservation lands, flood prone areas, soils, freshwater wetlands and groundwater recharge for the Regional Center. (See Appendix 1, Figures A.1 – A.6). These maps, prepared by the Somerset County Planning Board and modified for this Strategic Plan, provide an environmental framework for land use planning, public acquisition and infrastructure investment decisions. They are an important tool for implementation and can be used by the communities to assist in targeting open space preservation efforts and can support the completion of Waste Water Management Plans.

The communities all have environmental regulations in place to protect environmental resources. Improvements in regulations such as storm water management techniques should be encouraged. Enhanced storm water management techniques will improve water quality of the Raritan River and its tributaries and will minimize bank erosion. Recreational opportunities could also be enhanced by improved regulations.

While the Regional Center is rich in environmental resources, many resources unfortunately have too often been neglected. There are many brownfield sites that are in need of environmental cleanup. Two of the largest and most important of these is the Wyeth site in Bridgewater and the Somerville Landfill. Both sites are near the Raritan River. The Wyeth site, in particular, would be a key acquisition parcel for the Raritan River Greenway but will require extensive decontamination before it can be opened for public access.

Somerville Landfill Site, Somerville

Recreational Opportunitites

Recreational opportunities within neighborhoods vary widely, with extensive opportunities available in Somerville and certain areas of Bridgewater and few opportunities in other areas. A graphic depiction of these resources is provided in Figure 6 Recreation, Open Space and Natural Systems.

A key resource in the Regional Center is the Frank "Nap" Torpey Athletic Complex. This site is an initiative of the Somerset County Park Commission that involves the development of a multi-district athletic complex on property acquired by Somerset County as part of its on-going Park/Open Space program. The property is located along the north side of the Raritan River in Bridgewater Township. The property is one of several acquired, or to be acquired, as part of the County's Raritan River Greenway initiative; a priority park as

defined by the County's duly adopted "Parks, Recreation and Open Space Master Plan".

Torpey Athletic Complex

The overall athletic facility is being designed to respond to an urgent need to provide the residents of the Regional Center with much-needed new athletic fields. The short fall in facilities has become critical with the Region's increased population and the demand upon overloaded existing local facilities. This project would provide direct relief with the construction of alternatives to the Region's existing facilities. By sharing the proposed new facilities with several local entities, from both the private and public sector, the County foresees an opportunity to maximize an exceptional location, and to leverage the resources of several jurisdictions.

The existing athletic facility includes one lighted baseball field, one lighted softball field, which is available for rental for tournaments and league play and practice. The open field to the south of the baseball and softball fields is currently programmed as soccer fields for the local recreation departments and high schools. This open area will become the next phase of the overall athletic complex development, and will include a synthetic turf multipurpose athletic field with associated indoor recreational and support facilities. This phase is currently being designed. A future development phase will include two natural turf multipurpose fields.

Community Facilities

The Regional Center is served by a variety of community facilities, including major County facilities located within Somerville and the Bridgewater Core area. The Somerset Medical Center, is a major institutional use serving the Regional Center area and beyond. The location of these community facilities in existing residential areas has resulted in issues including noise, parking and traffic concerns.

Two school districts serve the Regional Center. The Bridgewater-Raritan district is experiencing rapid growth, while the Somerville district is experiencing more modest growth. Growth due to redevelopment in Somerville and Raritan may increase the need for schools there, but it is projected that the largest growth in the school age population will continue to occur in Bridgewater. A new school, Milltown Elementary, opened in Bridgewater in 2005 and a $15 million referendum is currently being considered for improvements and additions to the Bridgewater Raritan High School.

Bridgewater Raritan High School

The Regional Center municipalities have long prided themselves on entering into shared-services agreements to reduce costs and provide higher levels of service. Many of the Regional Center's community facilities present opportunities to promote increased shared services. For example, three library systems operate in the Center. The Bridgewater Library is the main library for the Somerset County Libraries. Somerville and Raritan each operate their own library.

Public safety is another area in which shared services could be pursued. All three municipalities' police departments are experiencing shortages of available space, and the municipalities are already sharing some fire and rescue personnel. Other potential areas for increased shared services or facilities include public works and municipal administration.

Historic Resources

The Regional Center has a rich historic legacy dating to pre-colonial times, when the area was occupied by the Lenni-Lenape peoples. In the 17th and early 18th centuries, the first European settlements in the Somerville–Raritan area were constructed near the banks of the Raritan River. Remnants of those settlements have been preserved and serve to remind the area of its early heritage. Somerville contains numerous well-preserved homes dating to the 19th and early 20th centuries. The Borough of Raritan is also rich in historic resources and important resources also exist in Bridgewater.

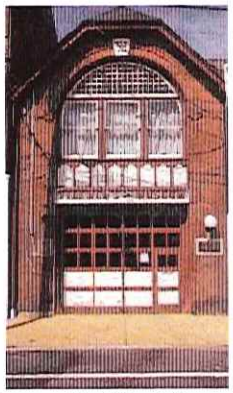
Lord Memorial Fountain, Somerville

The Regional Center contains a total of 7 sites listed on the National Register of Historic Places as well as 14 sites and one district eligible for listing.

There have been proposals to designate portions of downtown Somerville and adjacent residential areas as a historic district. To date, no action has been taken. Further study should be undertaken to determine the suitability of establishing a district. Specifically, appropriate boundaries and regulations need to be determined that will both ensure the preservation of the historic character of Somerville and not pose an undue hardship on property owners.

Some notable examples of historic resources in the Regional Center are listed below:

Somerville Fire Museum, Somerville
Constructed in 1888, the Somerville Fire Museum was originally the home of the West End Hose Company and is the only one of 4 original firehouses in Somerville. The Somerville Fire Museum has received state and county funding to undertake exterior and interior renovations.


Somerville Fire Museum

Raritan Relief Hose Company No. 2, Raritan
Built in 1894, this Victorian-gothic style firehouse is on the state and national registers of historic places. After using County funds to perform exterior renovations the Borough has obtained additional county funds to complete significant interior upgrades and renovations.

Raritan Relief Hose Co. No. 2

Somerville Borough Hall, Somerville
The historic Somerville Borough Hall is eligible for the National Register of Historic Places. A formal study is needed documenting the historical aspects of the building.

Van Horne House, Bridgewater
The Van Horn House is located in the easternmost section of the Regional Center in Bridgewater and dates to the late 1700s. It was the site of several important revolutionary war era events during the Battle of Bound Brook. The house is now owned by Somerset County who provided funds for the restoration.

Wallace House/Old Dutch Parsonage, Somerville
The Wallace House, home to George Washington for 6 months during the Middle Brook encampment, is a state owned historic site and on the national register of historic places. It has been a museum for over 100 years. The Old Dutch parsonage, also owned by the state, is an 18th century structure that shares the property. It is currently being restored with state funds.

Wallace House, Somerville

Somerset County Courthouse Green, Somerville
Containing the 1909 beaux-arts courthouse, John Russell Pope designed fountain, and the old reformed church, the courthouse green and its structures are on both the national and state registers of historic places. All are owned and maintained by Somerset County.

Somerset County Courthouse, Somerville

Van Veghten House, Bridgewater
The Van Veghten House in Bridgewater dates to the early 1700's and serves as the headquarters for the Somerset County Historical Society. It is listed on the state and national registers.

Van Veghten House, Bridgewater

Raritan Train Station, Raritan
Dating to the 1890s, the Raritan Train Station is an excellent example of a Richardsonian Romanesque style station. The structure is listed on the national and state registers and is owned by New Jersey Transit

Raritan Public Library, Raritan
Built as a homestead for the Frelinghuysen family in 1750, this state and national register site is the Raritan Public Library.

Raritan Public Library

Nevius Street Bridge, Raritan
The 300 hundred foot long Nevius Street Bridge connects Raritan with Hillsborough over the Raritan River. Constructed in 1886 it is the oldest metal-truss bridge in Somerset County. It is listed on the state and national registers and now only carries pedestrians and cyclists. It could provide a valuable link between any future Raritan River traffic and the Duke Estate.

Nevius Street Bridge, Raritan

Crossroads of the American Revolution National Heritage Area
In July of 2006 the federal government formally declared portions of 14 counties in New Jersey (including all of Somerset) as part of the Crossroads of the American Revolution National Heritage Area. This designation is aimed at promoting tourism and coordinating the preservation of New Jersey's revolutionary era historic sites.

This Strategic Plan recommends the communities continue to preserve important historic resources and increase public awareness and understanding about resources as much as possible. While Somerville has a historic advisory committee, Bridgewater and Raritan currently have no such body within their local governments. Both communities should investigate the possibility of establishing a historical commission or committee that could advise the governing body on historic preservation issues.

Cultural Resources

The Regional Center currently lacks a major performing arts facility or other center for cultural presentations. The Somerset County Library and County Vocational School in Bridgewater offer limited performance and cultural presentation space, and, while there are conceptual plans for creation of a Children's Museum in the vicinity of the Library and Vocational School, its development is likely several years distant.

County Vocational School, Bridgewater

A dedicated regional community center, which has been proposed by the Regional Center Partnership, could help make the Regional Center more of an entertainment and cultural destination, providing a central location for performance and cultural events, as well as meeting space for various Regional Center social and service organizations.

GOALS AND OBJECTIVES

A number of goals and objectives have been identified in this Strategic Plan. These goals and objectives form the basis for the Implementation Plan Matrix and have been developed in response to the major issues currently facing the Regional Center. Goals and objectives are presented for each of the seven major focus areas.

Downtowns and Main Streets

- Focus the future growth and development into downtown Raritan and Somerville by redeveloping underutilized sites and continuing the active revitalization of the downtowns, while maintaining the historic character, mix of uses, activities, pedestrian character and events that make these downtown areas unique. It is this unique character that provides their special commercial niche, separating them from the more common suburban strip-commercial areas.

Somerville Downtown

- Further existing redevelopment opportunities such as the Raritan Woolen Mills, Somerville Landfill and Downtown Somerville Shopping Center sites, while identifying additional redevelopment sites on brownfields or grayfields within the downtown areas.
- Promote economic development within downtowns and Main Street commercial areas through the use of innovative financing mechanisms and business development programs.
- Make downtowns vibrant, walkable and attractive.
- Support the redevelopment and revitalization of neighborhood Main Street commercial districts such as downtown Finderne in cooperation with the local community.

Finderne Main Street, Bridgewater

Redevelopment Areas, Economic Development and Community Design

- Encourage redevelopment in focus areas that will return underutilized land to productive use, improve the quality of life, enhance community character, create new employment opportunities and strengthen the municipal tax base.

Vacant Building, Somerville

- Encourage publicly accessible parks and open space as part of redevelopment areas where appropriate.
- For redevelopment areas near the proposed Raritan River Greenway, ensure that public access is provided from the existing community to the Greenway.
- Improve the quality of development in the Regional Center.
- Consider establishment of special design districts and guidelines to promote high quality development.
- Promote new development that is accessible, attractive and safe.
- Ensure that new development includes appropriate landscaping, street furniture, sidewalks and access to mass transit.
- Establish gateways and coordinated design focal points in the Regional Center.
- Promote coordinated and uniform design standards.
- Focus development in the Regional Center within the downtowns and Bridgewater Core area.

Raritan Downtown

- Facilitate development through a coordinated, predictable and streamlined approval process.
- Increase State incentives for development in the Regional Center.
- Address quality of life issues such as affordable housing and transportation to improve the business climate.

- Pursue commercial development to attract tax ratables and reduce the residential tax burden.
- Strength the predictability of the business development process to encourage investment in the area.
- Create facilities and programs for attracting high tech businesses and service firms, as well as research and development activities, capitalizing on the technological and pharmaceutical clusters in the Regional Center.

Ethicon Offices, Bridgewater

- Foster diverse business opportunities that strengthen the Regional Center economic base.
- Upgrade and enhance existing infrastructure to sustain and promote economic development.
- Survey infrastructure conditions and explore establishment of an infrastructure bank in cooperation with the County.

Train Station Areas

- Reduce traffic congestion in train station areas while maintaining or increasing ridership levels.
- Reduce the impacts from train station parking on surrounding residential neighborhoods.
- Promote mixed-use redevelopment in train station areas to increase ridership, create and revitalize "central place" areas surrounding train stations, and promote pedestrian access to stations.

Somerville Train Station Park n Ride

- Take advantage of innovative programs to spur improvements within all of the Regional Center's train station areas.
- Encourage connections with pedestrian and bicycle facilities and other forms of public transit.

Neighborhoods and Housing

- Protect the community character and quality of life within existing Regional Center neighborhoods.
- Consider appropriate design standards for neighborhoods to ensure that infill development is compatible with the existing character of developed residential areas within the Regional Center.
- Continue and enhance protections for historic neighborhoods, landmarks and historic properties throughout the Regional Center.

Residential Neighborhood, Somerville

- Use traffic calming measures where appropriate to enhance pedestrian safety.
- Preserve neighborhoods by promoting compatible infill development.
- Connect neighborhoods to downtowns and other destinations through safe and attractive streets.
- Provide a greater range of housing choices and affordability in the Regional Center.
- Increase the range of senior citizen housing in the Regional Center.
- Promote additional housing in downtown areas.
- Maintain and strengthen residential neighborhoods.

Circulation

Roadways

- Reduce congestion.
- Improve intersection efficiencies through enhanced traffic signal timing, improved striping and clear directions to users.
- Create a policy on what level of service (LOS) is acceptable based on location and function of road.
- Work with state and federal partners to ensure free movements along urban principal arterials.
- Identify sites for neighborhood traffic calming.

Pedestrian Crosswalks, Somerville

- Separate local and regional traffic along Route 22 according to the "Boulevard" concept.
- Implement Transportation Demand Management techniques.
- Prepare a 5-year road improvement plan.
- Coordinate road improvements between the member municipalities of the Regional Center and Somerset County.
- Encourage access management principals on all roads.

Controlled Access, Regional Center

- Consolidate commercial driveways along high volume corridors.
- Eliminate four-lane no shoulder and no left hand turn lane cross sections throughout the Regional Center.
- Ensure that all road projects meet the context of the adjoining land uses.
- Reduce collisions and accidents for all transportation modes.
- Share crash data among all levels of government and encourage all data is collected consistently.
- Work with local police to identify problem areas.
- Keep speeds at the appropriate level based on context and functional class.

Reduced Speed Area, Somerville

- Implement physical measures to slow cars on local streets.
- Educate the public on traffic calming measures.
- Promote a consistent enforcement program.

Bicycling

- Encourage bicycling throughout the Regional Center.
- Adopt the NJ State bicycle guidelines as the guidelines for the Regional Center.
- Make roads bicycle compatible whenever possible.
- Encourage/install bicycle facilities (racks, lockers, showers) at appropriate destination points.

- Develop and implement a bicycle facility network for the Center.

Peters Brook Greenway

- Create off-road facilities where appropriate for commuting and recreation.
- Create off-road shared use paths along the Raritan Greenway.
- Develop a system for capturing all bicycle crashes, not just those involving a motor vehicle.

Walking

- Encourage walking throughout the Regional Center.
- Compile an inventory of all existing sidewalks and connections (off –road).
- Develop an implementation plan to correct deficiencies.
- Ensure that all routes to schools are pedestrian friendly and have enhanced crosswalks and signs.
- Create off-road shared use paths along the Raritan River Greenway.
- Adopt the NJ State pedestrian guidelines as the guidelines for the Regional Center.
- Make areas within 1/4 mile of a transit stop pedestrian friendly.
- Make sidewalks and road interfaces ADA compatible.

Pedestrian Walkway, Bridgewater

Goods Movements

- Accommodate freight movements to and through the Regional Center.
- Locate warehouse facilities along existing rail infrastructure.
- Improve all at-grade rail crossings.
- Identify all truck routes in Regional Center to avoid schools and other high pedestrian areas.

Public Transportation

- Ensure mass transit services are sustained and improved upon and implement new mass transit options.
- Make mass transit service more frequent, especially for reverse commuters.
- Provide real time information for bus and rail riders to make service more user friendly.
- Increase mass transit service by extending existing bus routes and providing new routes (rail or bus) in the Eastern Gateway and the Regional Center Core.

Public Transit, Bridgewater

- Improve access to mass transit by making all neighborhoods within 1/2 mile of train stations and 1/4 mile of bus stops pedestrian and bicycle friendly.
- Provide bus shelters, crosswalks, bicycle parking, route maps, route schedules, proper lighting and other important amenities for public transit users at all bus stops.

Transportation Planning

- Encourage coordination between land use and circulation system planning to maximize land use efficiency, increase opportunities for transit, reduce vehicular trips and minimize conflicts with pedestrians and non-motorized vehicular movements.
- Talk to all interested parties during all phases of a road project (problem statement, concept/planning phase, scoping, preliminary and final design and construction)
- Ensure that all modes of transportation are considered for every transportation project.

Recreation, Open Space and Natural Systems

- Coordinate park and recreational opportunities among all communities within the Regional Center and with Somerset County as a whole.

Somerset County Park Commission, Bridgewater

- Continue the creation of a Regional Center park and recreation system to provide a variety of passive and active recreational opportunities to all members of the community.
- Encourage the use of innovative strategies, policies, and funding mechanisms to maintain existing parks, recreation, and open space.
- Leverage the Regional Center's innovative regional planning efforts to gain access to additional funding sources for parks and recreation.
- Incorporate publicly accessible parks and open space into major redevelopment projects such as Raritan Woolen Mills, Somerville Landfill, and Wyeth site.
- Utilize open space and greenways to create pedestrian/bicycle community connections throughout Regional Center neighborhoods.
- Encourage improvements in environmental regulations such as storm water management techniques.

Torpey Farm, Bridgewater

Shared Services, Community Facilities, and Historic and Cultural Resources

- Continue to pursue shared service agreements among the Regional Center municipalities and between the municipalities and other governmental bodies such as Somerset County and area school districts.

Bridgewater Municipal Complex

- Expand opportunitites for cultural activities within the Regional Center and study the potential for creation of a regional community center to promote recreational and cultural opportunities for those who live, work and play in the area.
- Monitor school facilities in Raritan, Somerville, and redeveloping areas of Bridgewater to ensure that sufficient capacity is available for the residential components of mixed-use redevelopment.
- Monitor the capacity of infrastructure systems in Somerville and Raritan to ensure that services can be

provided adequately to major redevelopment at sites such as the Somerville Landfill, Raritan Woolen Mills, and the Johnson Drive sites.

- Expand and capitalize on historic resources in the Regional Center.

Basilone Memorial, Raritan

- Promote cultural and heritage tourism activities such as the State Crossroads of the Revolution Campaign.
- Make historic preservation an integral part of regional planning and the local land development review process.

ACTION STRATEGY

A clear action strategy to advance implementation gives weight to the recommendations in this report. The action strategy outlined here identifies programs, policies, responsible agencies, schedules, and funding sources for all recommended implementation strategies. Specific strategies are grouped according to the seven major focus areas of this Strategic Plan.

- **Downtowns and Main Streets:** Somerville and Raritan have thriving downtowns, but substantial opportunities exist to further increase the vitality of these traditional "Main Street"central places. In addition, the Main Street commercial area of Finderne is in need of revitalization. This Strategic Plan includes strategies for bolstering the strength of all of the Regional Center's downtown and Main Street commercial areas.

- **Redevelopment Areas, Economic Development and Community Design:** Seven (7) redevelopment areas form a central component of strategic planning in the Regional Center. This plan identifies specific strategies for moving ahead with the redevelopment of the Somerville Landfill, Downtown Somerville Shopping Center, Somerville Eastern Central Business District, Kirby Avenue, Wyeth Site, Orlando Drive and Johnson Drive corridor. Redevelopment of these sites will provide the cornerstone of new economic growth. Strategies to assure appropriate attention to community design are also recommended.

- **Train Station Areas:** The Regional Center has train stations that are utilized heavily by commuters but which are underutilized as nodes of development. The action strategies outlined here include recommendations on ways to jump-start the process of encouraging compatible redevelopment in the train station areas.

- **Neighborhoods and Housing:** Implementation strategies are recommended here to ensure that infill residential development and new infrastructure are compatible with the character of existing neighborhoods and are responsive to the desires of neighborhood residents. Recommendations for new housing opportunitites are also included in the action strategy.

- **Circulation:** The Regional Center's highway corridors are heavily used by residents and visitors alike. They are often aesthetically displeasing and functionally constrained. Land use and transportation strategies recommended in this document will improve the visual and functional qualities of the Regional Center's highways. This Strategic Plan recommends strategies for moving forward on many projects that have begun in the last few years, such as the Route 22 Suburban Boulevard Project. It also includes strategies for

improving public transportation in the Regional Center, utilizing Transportation Demand Management to reduce congestion on roadways, and making other highway corridor improvements. Opportunitites to encourage walking and bicycling throughout the Regional Center are also recommended.

- **Recreation, Open Space and Natural Systems:** Implementation of the Raritan River Greenway has long been an objective of the Regional Center Partnership, Somerset County, and the individual municipalities. Strategies are recommended for continuing to acquire and develop parkland in the greenway. Strategies are also recommended to improve recreational opportunities throughout the Regional Center and to reinforce the role of natural resources in shaping the development of the Regional Center. Opportunities to improve environmental regulations, such as storm water management techniques, are also recommended.

- **Shared Services, Community Facilities, Historic and Cultural Resources:** A willingness to share municipal services has long been among the noteworthy qualities of the Regional Center municipal governments and other agencies in the area. Potential further sharing of services to increase the level of service and reduce costs are recommended in this plan, as is the expansion of historic and cultural opportunitites and resources.

STRATEGIC IMPLEMENTATION PLAN RECOMMENDATIONS & MATRIX

The implementation items shown here constitute an action agenda for the Regional Center over the next twenty years. These items are categorized according to the seven focus areas and are summarized in an Implementation Agenda Matrix, found in the next section.

The matrix includes a schedule identifying the time frame during which each item should be implemented. In the matrix, "short term" means between one and five years, "intermediate term" means between five and ten years, and "long term" means ten or more years. Short term implementation is recommended for many items so that the Regional Center can begin to experience immediate results. These implementation items and associated sites are detailed in each municipality's Master Plan, which includes more specific recommendations.

This list and the accompanying matrix also recommend numerous potential funding sources for these programs. In all cases, the Regional Center should receive priority for State and County funding due to its unique status as a regional organization that is pursuing comprehensive planning to an unprecedented degree within suburban New Jersey. Through their funding mechanisms, the State and County should recognize that the Regional Center has the potential to become a model for strategic planning in New Jersey.

The Regional Center should also work closely with the Department of Community Affairs to identify and apply for additional sources of aid at the State and National levels from both government and private sources. In addition, it is recommended that the Regional Center and Somerset County explore the redevelopment financing possibilities that could become available through the Somerset County Improvement Authority.

Downtowns/Main Streets

Residential Living Downtown

The New Jersey Department of Community Affairs sponsors an innovative program to encourage downtown living above shops and offices. The program, known as Upstairs Downtown, provides access to below-market-rate mortgages for residences in downtowns. Somerville and Raritan should take advantage of this program to increase the population in their downtown areas, improving the range of housing choices, affordability and senior citizen housing.

Downtown Somerville

Main Street Assistance

The State of New Jersey Department of Community Affairs sponsors the Main Street New Jersey technical assistance program, which is designed to provide business communities with the skills and knowledge to manage their own business districts while improving the economy and appearance of downtown. This program can be applied in Raritan as well as the Finderne commercial area in conjunction with other programs including redevelopment planning, design standards, and train station initiatives.

Downtown Raritan

Special Improvement Districts (SID's)

Special Improvement Districts are a DCA-sponsored program that allows for a special levy on businesses within a downtown or other commercial area. Revenues go toward marketing, maintenance, and security upgrades. DCA also provides challenge grants and loans geared toward getting Special Improvement Districts started. Somerville already has a Special Improvement District. Raritan should investigate establishing a Special Improvement District in their downtown area.

Finderne CBD Study

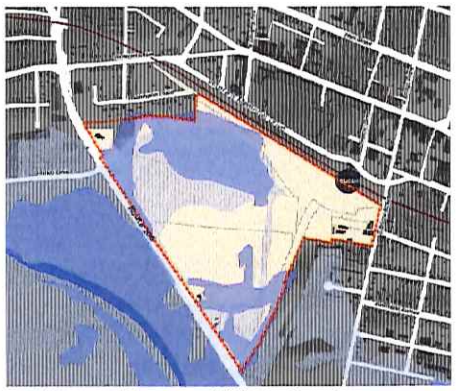
It is recommended that a revitalization study be conducted for commercial properties at the heart of Finderne. Such a study would provide an opportunity to promote a more walkable environment with improved facades and upgraded retail. The objective would be to boost the long-term desirability of Finderne in order to retain residents and attract new businesses. Loan programs such as those sponsored by the New Jersey Redevelopment Authority could help with actual redevelopment projects.

Finderne Main Street, Bridgewater

Redevelopment Areas/Economic Development/Community Design

Somerville Landfill

This site adjacent to downtown Somerville has an adopted redevelopment plan based primarily upon development of a regional retail facility. Although some retail use is appropriate for the property, greater emphasis should be placed in the plan on alternative or mixed-use options. Primary issues, aside from the appropriate mix of land uses, include the need to address contamination from the prior landfill on the property, provide for the appropriate connections to and from the Borough's Main Street business district, and provide for suitable connections and relationships between the redevelopment area and the N.J. Transit passenger rail station.



Somerville Landfill Redevelopment

The project is a potential candidate for an Environmental Opportunity Zone tax increment financing district. This project should also be included in applications for funding under the Transit Village Initiative, Local Aid for Centers of Place, and Livable Communities pilot program. Businesses in the project should be integrated into existing Somerville programs such as the Special Improvement District.

Downtown Somerville Shopping Center

This shopping center disrupts the streetscape in downtown Somerville but provides essential services including a major supermarket for area residents. Somerville recently adopted a redevelopment plan for West Main Street Area that includes this site. The plan envisions a mixed-use development including up to 275 residential units, mixed with substantial retail and office use and structured parking. The plan contains various design guidelines for redevelopment of this area.

The site can be considered a "grayfield" and will require financial assistance for redevelopment. Potential sources of this assistance include New Jersey Redevelopment Authority loans, Economic Development Authority loans and Casino Reinvestment Development Loans. The redevelopment of grayfields is still relatively uncommon and strategies continue to evolve as more of these older shopping centers become vacant or underutilized. The Borough should work with the Department of Community Affairs to identify potential funding sources for the redevelopment of grayfields.

Somerville Eastern Central Business District

Various planning documents over the years have recommended the redevelopment of the eastern half of Somerville's central business district. The district contains an inappropriate mix of land uses, a poor pattern of lot configuration, some site contamination issues and a number of under-or poorly-utilized properties. In 1999, the Borough designated this area as a redevelopment area. Preliminary studies call for a mix of retail, office, service and residential uses at somewhat higher densities and intensities than currently exist. These studies also anticipate redevelopment of the area in various phases as portions of the land are assembled. As the various phases are developed, the plan may need amendment to adjust for changing conditions. At this time, however, the redevelopment plan for the area needs to be finalized and adopted. The district may be eligible for many of the same financing options and assistance programs discussed above for the Borough's other two redevelopment areas.

Kirby Avenue

Somerville has designated the Kirby Avenue area to be in need of redevelopment. The area includes the lands bound by the NJ Transit right-of-way to the south, Loeser Ave. to the west, Fairview and Kirby Avenues to the north and Adamsville Road to the east. The primary site, known as the Baker and Taylor building, on Kirby Avenue has been vacant for approximately five years since the company moved its operations to Route 22.

Baker Taylor Site, Kirby Avenue, Somerville

The Kirby Avenue redevelopment area is surrounded by an established neighborhood of single family homes. The site is also on the border with Bridgewater and is in close proximity to the Torpey Recreation Complex. The Borough is currently just starting the process of developing the vision plan/redevelopment plan for the Kirby Avenue redevelopment area. They anticipate conducting an inclusive public process to develop a redevelopment plan for the area.

Wyeth (American Cyanamid) Site

This massive site, located in Bridgewater's East Gateway, presents perhaps the largest single redevelopment opportunity and challenge within the Regional Center. Development of the site should occur according to a coordinated planning process rather than in a piecemeal fashion and should adhere to the following principles:

- Gradual re-establishment of the natural systems, including wetlands, in the southern part of the site.
- Establishment of recreation areas within the southern portion of the site.
- Establishment of public access through the site to the Raritan River Greenway.
- Extensive use of innovative funding sources to facilitate redevelopment, healing of natural systems, and development of recreation areas.

Wyeth Site, Bridgewater

The Wyeth redevelopment project has the potential to become a showpiece for innovative redevelopment planning in New Jersey. The Regional Center Partnership and Bridgewater Township should work to further develop redevelopment strategies for the site and should apply for major national programs such as the USEPA's Project XL and Sustainable Development Challenge Grants to make development a reality. State programs such as the Hazardous Site Discharge Remediation Fund and conventional brownfields programs from USEPA are also opportunities for redeveloping the site.

Orlando Drive

The Orlando Drive study will look at relationships between and among pedestrian generators, service providers, places of employment and residential populations. It will identify the open space and environmental assets along the river corridor and will examine opportunities for linkages and improved pedestrian and bicycle connectivity between and among the

historic centers of Raritan and Somerville, the redevelopment area at the former Somerville Landfill, and along Orlando Drive.

Orlando Drive, Raritan

Johnson Drive

This project provides an economic development opportunity for the Borough of Raritan. The redevelopment process should be employed to identify appropriate uses for the sites and that the sites are redeveloped in a manner that will benefit the Borough over the long term. The Borough should identify potential funding sources for businesses that will be located in the redeveloped Johnson Drive sites. These programs could include business assistance programs from the state including NJEDA assistance for manufacturers; NJEDA bond financing, direct loans, and guarantees; and the Sustainable Development Loan Fund for businesses working to better the environment.

Johnson Drive, Raritan

New Redevelopment Areas Identification

The Strategic Plan recommends that each community continue to identify any new areas that are "in need of redevelopment". The term "redevelopment", as used here, is an official New Jersey legal term. An area undergoing "redevelopment" connotes that the area has gone through a formal process of self-identification initiated by the municipality and has met specific criteria codified in state law. By obtaining this designation a municipality gains certain powers and authority such as the ability to use eminent domain, acquire properties and select a redeveloper without a formal bidding process.

Commercial Mixed Use Design Standards

Design standards are needed for infill commercial and residential construction throughout downtown Somerville and Raritan. Illustrated standards should be adopted as part of municipal zoning ordinances to ensure the standards are clearly understood by everyone in the development process. The

project should be undertaken jointly by the two municipalities; funding can be provided by local planning assistance grants. This project can also "piggyback"on other downtown projects such as Special Improvement Districts and train station-related initiatives. Somerville already has a Special Improvement District, Architectural Review Board and design standards.

Residential Design Standards

The Regional Center should help protect the character of existing residential neighborhoods by supporting development of residential design standards with illustrations as part of the zoning ordinance of each municipality. The standards should be clear and understandable. Graphic illustrations will help to ensure that the standards can be interpreted easily by property owners, developers, architects, construction officials, and municipal staff and officials. Placement of garages, extent of "green" in the front yard, curb cuts and preservation of nature street trees are examples of neighborhood characteristics which may be considered for design standards.

Residential Neighborhood, Somerville

Train Station Areas

Transit Village Initiative

The Strategic Plan recommends that the Regional Center apply for the New Jersey Department of Transportation's Transit Village initiative. The Regional Center has a cluster of train stations, with one station serving each municipality. Each station faces a different set of challenges. The Regional Center could benefit substantially from a program designed to connect them more securely to the surrounding context. The Raritan program would work closely with the Third Street Redevelopment Area proposed in the Raritan Master Plan Update. In Somerville, the program would tie into the redevelopment of the Downtown Somerville Shopping Center and Somerville Landfill sites. The Transit Village program could be supplemented with funding from NJDOT's Local Aid for Centers of Place and/or the NJDOT Livable Communities pilot program.

Somerville Train Station

Third Street Redevelopment Study

The Borough of Raritan has an opportunity to further the redevelopment of downtown Raritan and increase the use of the train station by conducting a redevelopment study for the former industrial area adjacent to the Raritan Train Station. The long-term goal would be to provide a mixed-use development in the area complementing the existing downtown and compatible with adjacent residential neighborhoods. Funding for redevelopment could come from sources such as the New Jersey Redevelopment Authority's loan programs. The Transit Village initiative and related funding could also provide assistance with the implementation of this proposal.

Raritan Train Station

Neighborhoods/Housing

Neighborhood Plans

Each municipality should identify specific neighborhood areas in need of attention and the characteristics of these neighborhoods. Plans should be developed for each identified neighborhood to ensure that development, redevelopment, revitalization and preservation occur in a manner which protects and enhances these areas. In each neighborhood, a charrette-driven neighborhood planning process should be conducted with extensive involvement from community residents. Issues of development, parks, recreation, circulation, connections, and community facilities should be addressed.

Residential Neighborhood, Somerville

Potential funding sources for neighborhood planning and implementation include:

- Neighborhood Preservation Grants and Adopt-a-Neighborhood programs from NJ Department of Community Affairs.
- County Community Development Block Grant funds.
- NJHMFA 100%mortgage program and HOME neighborhood preservation assistance for homeowners.

- State Neighborhood Revitalization Tax Credits in lower-income census tracts.
- USEPA Office of Environmental Justice Small Grants for environmental/open space projects.

Senior Housing Opportunities Study

The Strategic Plan recommends undertaking a study to identify housing and access opportunitites for seniors in the Regional Center. The senior population in the Regional Center is expected to increase in the future as baby boomers continue to age. A study that specifically identifies new housing opportunitites for seniors and access and circulation issues within each community and the Regional Center will help ensure future housing needs can be satisfied. Potential funding sources for this study include County Municipal Planning Partnership grants, Regional Center Challenge grants and State Smart Growth Planning grants.

Senior Housing, Bridgewater

Joint Housing Initiatives

The Regional Center communities should examine the potential for pursing joint housing initiatives and whether it would be mutually beneficial to take a regional approach to the issue of housing. The communities could work jointly on shared Regional Contribution Agreements (RCAs). Other opportunitites may also exist to help promote more housing availability and affordability in the Regional Center. Potential funding sources for this initiative include County Municipal Planning Partnership grants, Regional Center Challenge grants and State Smart Growth Planning grants.

Circulation Systems

Route 28 Corridor

The Route 28 Corridor is undergoing a needs assessment study. The area of most concern for the Regional Center is the section from the border of Bridgewater and Bound Brook to the west and the beginning of the Somerville downtown area. This portion of Route 28 is in need of enhancements to the sidewalk network, mass transit stops, and existing traffic signals. This area also has some drainage issues that should be addressed during any reconstruction of the road.

The Regional Center Partnership along with Somerset County and the municipalities of Bridgewater and Somerville should pursue grant money to complete the sidewalk network. NJ Transit should be upgrading all bus stops along the corridor to have shelters, crosswalks and sufficient lighting. NJDOT should upgrade all signals to work as an entire system that

could be adjusted to account for A.M. and P.M. peak traffic times, provided that modification will not adversely affect pedestrian access and safety.

Somerville Circle

The Somerville Circle has always been and will probably always be a choke point for traffic in the Regional Center. The Somerville Circle is actually the junction of three highways (Route 202, Route 206 and Route 28). In the early 1990's the circle was modified to remove the Route 202 traffic and place it over the circle on a new overpass. This project eliminated the Route 202 traffic from the circle. The existing circle underneath remains and still carries traffic from Route 28 and Route 206. There continues to be operational constraints as well as safety issues associated with this circle.

Somerville Circle

Long-term solutions are needed for this traffic problem. The Regional Center Partnership along with Somerset County should encourage NJDOT to continue to work on the configuration of the existing circle in order to minimize the amount of crashes and to improve capacity. Long-term redesign should include provisions for a non-motorized grade separated facility that connects Raritan to Somerville and Bridgewater to the north.

Route 202 Corridor

The Route 202 Corridor in Bridgewater and Raritan has certain choke points and corridor issues that should be studied. The highway acts as a dividing line of sorts, which makes connections from the north to the south difficult at best. The First Avenue intersection is a major choke point and should be part of a new Somerville Circle study. Growth to the west has made Route 202's volumes increase substantially over the past fifteen years.

The Regional Center Partnership along with Somerset County should encourage NJDOT to improve the pedestrian crossing at Route 202 and First Avenue and implement access management techniques along the Route 202 corridor. These techniques may be further supported by local zoning requirements and site design review. As part of the access management study there should be a build out analysis and traffic projection.

Route 22 Suburban Boulevard Plan

The Route 22 Corridor runs through the northern portion of the Regional Center. The area of this corridor east of Route 202/206 includes a large grassed and landscaped median which

contains a variety of commercial land uses. This corridor's land use is integrally linked to the opportunities and constraints of the transportation issues found here. This corridor is also critical not just an east west direction but as a corridor to be crossed from the south to the north. The grade-separated crossings also serve to create some of the most dangerous areas in the Regional Center for potential crashes.

Route 22

Current long range planning for this area would reduce congestion, provide more coordinated access to local business and improve safety for pedestrians and bicyclists. This will be accomplished by transforming the current high speed corridor into a "Suburban Boulevard," a design concept that would redefine this section of Route 22. The concept would redevelop this high-speed arterial, which only accommodates motor vehicle traffic, into a "boulevard" or "parkway", which would be capable of accommodating both local and through motor vehicle traffic as well as non-motorized travel modes. The transformation of this portion of Route 22 will enhance its economic competitiveness and its redevelopment potential.

As a first step, the Regional Center Partnership should be working with the existing business/property owners to consolidate driveways where possible and support local zoning efforts that encourage lot assembly and the reduction of individual access drives in this area. From a longer time frame scenario the Regional Center Partnership should be completing the Route 22 Corridor study and a Needs Statement that outlines how the project should be included in the NJTPA Regional Transportation Plan (RTP). The Regional Center Partnership along with Somerset County should work to advance the project into the Project Development Work Program (PDWP) in order to get funds to scope the project; obtain categorical exclusion or environmental assessment and enter as a "Candidate Project" in the Transportation Improvement Plan (TIP). Somerset County and the Regional Center Partnership continue to advance this project though the project development process, working to secure funds for construction.

Routes 287,202/206, and 22 Interchange(s)

The interchange areas in the middle of the Regional Center have the highest amount of traffic volumes in Somerset County. These roadways provide regional access to the Bridgewater Commons Mall, Somerset Corporate Center, Raritan Mall, the downtown areas of Somerville and Raritan and the multiple retail and office uses and government institutions located in the area. Since these roads serve a

critical regional role the potential for failure of these interchange areas from a level of service standpoint posses a severe threat to adjoining neighborhoods. If this condition goes unaddressed it could eventually lead to economic stagnation. Given the decades it can take to begin major roadway construction projects, the Regional Center should be addressing this impending traffic congestion problem today in order to have a solution ready before the problem begins to result in job losses and reduction of quality of life in the Center.

Route 22

The Regional Center Partnership along with Somerset County should be advocating a study through the NJTPA to address the long-term traffic issues with this regionally important interchange area. The Regional Center Partnership along with Somerset County should work to advance the project into the Project Development Work Program (PDWP) in order to get funds to scope the project.

Chimney Rock Road

This area acts as one of the eastern gateways into the Regional Center and has been seen as a possible redevelopment area that could be served by a form of mass transit. With its aging industrial structures, relatively low density and access to the regional transportation roadway network, the Chimney Rock Road/Route 22 area is primed for redevelopment.

Chimney Rock Road

Currently, this area has heavy traffic volumes along Route 22 and Chimney Rock Road north of this area has many curves and could act as detriment for access to and from the Village of Martinsville. An existing rail right of way currently cuts through this area and connects to an active freight line to the south. This area also has good access to Route 22 and Route 287.

Somerset County and Bridgewater Township should ensure that all new and infill development in this area be designed to

incorporate the principals of "transit oriented development" such as Bus Rapid Transit (BRT) or light rail. In addition, 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 building and site design that is complimentary to any form of mass transit.

This area's existing rail corridor could be utilized for various mass transit options. Access management techniques along the Route 22 Corridor should also be considered in this area For example, combine driveways, minimize any new access points and encourage lot assembly. The Regional Center Partnership along with Somerset County should apply for funds from NJ Transit and the NJTPA to implement long-term BRT solutions for this important redevelopment area.

Regional Center Traffic Calming Plan

The Strategic Plan recommends that traffic calming techniques be implemented in the Regional Center as a way of enhancing traffic circulation and improving pedestrian and bicycle safety. Techniques should be implemented in selected neighborhoods and priority areas in the Regional Center where appropriate. Examples of initiatives that could be undertaken include creating a traffic calming "tool box", conducting education and outreach programs and developing pilot projects. These initiatives should be spearheaded by the Regional Center Partnership, together with input and assistance from the municipalities.

Residential Neighborhood, Raritan

Coordination of Road Improvements

The coordination of road improvements is an important ongoing objective supported by this Strategic Plan. It is recommended that all interested parties are contacted during all phases of a road project. In addition, all modes of transportation should be considered for every transportation project. Whenever possible, opportunitites for bicycling and walking should be encouraged. Lastly, all road projects should be considered in the context of adjoining land uses.

Access Management

Encouraging access management principals on all roads is an ongoing initiative that should be undertaken by NJDOT, Somerset County and the municipalities. Examples of access management policies recommended in this Plan include consolidating commercial driveways along high volume corridors, eliminating four-lane no shoulder areas and no left hand turn lane cross sections.

Bicycle Facilities Master Plan/Network

The Strategic Plan recommends that a Bicycle Facilities Master Plan for the Regional Center be prepared within the next five years and that a Network be implemented within the next ten years. This Master Plan study should examine bicycle suitability, demand analysis and needs assessment within the Regional Center. For example, a bicycle connectivity study to determine origins, destinations and proper facility combinations should be included as part of the Bicycle Facilities Master Plan in order to determine what improvements are necessary to create a full network of accommodation. A variety of funding sources are potentially available for this project including: NJDOT Planning Assistance programs; private health funding; federal enhancement funds; NJDOT local aid (earmarked bicycle facility funds); municipal funds; County funds; developer contributions; and employer contributions (on-site improvements).

Pedestrian Facilities Assessment and Improvement Plan

The Pedestrian Facilities Assessment and Improvement Plan project proposed in this Strategic Plan is an important initiative that should be jointly pursued by the Regional Center Partnership, Somerset County and the municipal governments in order to encourage walking throughout the Regional Center. This Plan recommends that a pedestrian facilities inventory and needs assessment be undertaken. An important component of this is to inventory existing sidewalks and connections in the Regional Center. The Safe Routes to School program should also be implemented. In addition, all sidewalks and road interfaces in the Regional Center should be made ADA compatible. Lastly, the Strategic Plan recommends that areas within ½ mile of transit stops and ¼ mile of bus stops be made both pedestrian and bicycle friendly.

Pedestrian Access, Downtown Raritan

Greenway/Shared Use Path Implementation

Raritan River Greenway

The Raritan River Greenway project has been spearheaded by the Somerset County Park Commission. The Raritan River serves as the southern border for the Regional Center and is a wonderful opportunity to create a non-motorized east–west pedestrian/bicycle connection in the Regional Center. Connections to the Raritan River Greenway in a north–south direction also should be preserved in order to create access from existing neighborhoods and commercial/office centers.

The Regional Center Partnership along with Somerset County and the Somerset County Park Commission should ensure that

all connections to and along this greenway are designed for good and adequate access. The Raritan River Greenway is an important long-term project for the Region and will reconnect the river to the Region. A coordinated linear park along the river could serve as an important alternative bicycling connection to New Brunswick, if completed that far. Bridge Street should be retrofitted to include better sidewalks and bicycle facilities in order to accommodate better access to the future Greenway.

Peters Brook Greenway

This Greenway could serve as an important pedestrian and bicycle link from Somerville north to the Bridgewater core area. This core area includes recreational facilities, commercial and office structures. This link could also help connect neighborhoods within Somerville. The Regional Center Partnership along with Somerset County and the Somerset County Park Commission should ensure that the proposed trail follows the current AASHTO guidelines on all design details. Where the Peter's Brook goes under streets in Somerville, consideration should be given to building a path adjacent to the Brook itself in order to avoid a grade crossing of the road. Since this is an important north –south linkage state enhancement funds could be used in order to build important crossings over Route 202/206 and Route 22.

Peters Brook Greenway

Accommodate Freight Movements

The accommodation of freight movements within the Regional Center is important for economic development and employment opportunitites. This Strategic Plan proposes that appropriate truck routes be identified for the Regional Center to ensure that existing neighborhoods, school areas and other high pedestrian areas, natural areas like open spaces and recreational and historic resources are not negatively impacted by truck traffic. This project should be undertaken by the municipalities and coordinated as mush as possible with the County Freight Study. Other recommended initiatives include locating warehouse facilities along existing rail infrastructure and improving at grade crossings throughout the Regional Center.

Truck Traffic, Downtown Raritan

Public Transportation Improvements

The Strategic Plan includes two important recommendations to improve public transportation in the Regional Center. First, local NJ transit service to New York City via the 117 bus line should be extended to include Raritan at Somerset Street and the Bridgewater Commons Mall. In addition, the Plan calls for the extension of local NJ transit service in Downtown Somerville and to the Landfill Redevelopment site. Both of these initiatives will require petitioning NJ Transit. This should be undertaken jointly by the municipal governments, Somerset County and the Regional Center Partnership.

Recreation, Open Space and Natural Systems

Torpey Athletic Complex Expansion

This Strategic Plan recommends that the Regional Center communities pursue the creation of a Regional Center shared recreation facility. This objective can be achieved with the expansion of the Torpey Athletic Complex. Somerset County, the municipal governments and Somerset County Parks Commission should work together to developed county-owned parkland to address Regional Center recreational needs. Funding for this initiative may be available from Smart Growth Planning grants, NJ Tree Planning grants and USEPA Green Communities program.

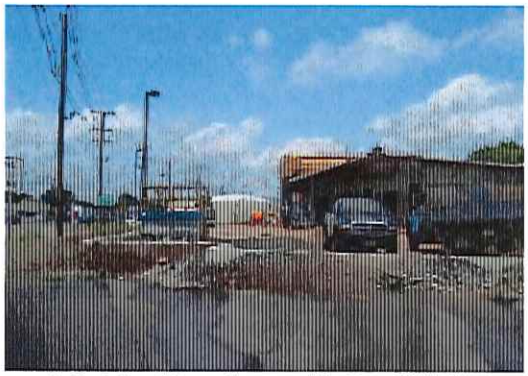
Torpey Athletic Complex

Raritan River Greenway Master Plan

The Raritan River is the Regional Center's most significant natural resource and potential recreation amenity. Somerset County has long been implementing a greenway plan for the Raritan River and some of its tributaries and branches. To support this plan and hasten its implementation within the Regional Center, several implementation recommendations are suggested here and a number of specific projects are proposed including:

- Strategic land acquisition planning. For example, the Strategic Plan recommends that the extensive environmental cleanup required to convert the Wyeth site in Bridgewater into a component of the Raritan River Greenway be undertaken in conjunction with the redevelopment of the northern part of the site.

- Obtaining public access easements through redevelopment areas. The Strategic Plan recommends that connections from the Somerville Landfill site to lands west of Route 206 including the Duke Estate be pursued.



Adjoining Uses, Somerville Landfill Site

- Identification and signage for access points to larger greenway networks, such as the East Coast Greenway and the Delaware & Raritan Canal State Park.

- Funding for ongoing preservation and maintenance of the Greenway.

Raritan River

A variety of funding sources are available to implement these aspects of greenway planning, development, and maintenance. The County should continue to acquire land using its available resources. Development of the greenway through the Regional Center to connect with the existing Greenway in the Duke Island area should be a top priority for the County. In addition, the County and municipalities should develop joint proposals to fully exploit Green Acres loans and grants. In turn, the Green Acres Program and the Garden State Preservation Trust should make acquisition and development for the Raritan River Greenway a top priority in recognition of the innovative regional planning and cooperation being undertaken by the County, the Regional Center Partnership, and its member municipalities. The Regional Center municipalities should pursue joint Certified Local Government status from the New

Jersey Historic Preservation Commission. This status would make the Regional Center eligible for certain grants and would contribute to the historic preservation of the Raritan River and surrounding lands.

In addition, the County and the Regional Center Partnership should work closely with the Raritan Basin Watershed Management Project to protect the river and its tributaries within the Regional Center. Nonpoint source pollution control will be an important component of improving the environmental health of the Regional Center's water bodies. Through the Raritan Basin project, the Regional Center should benefit from education, best practices, and land acquisition programs and funding sources for nonpoint source control.

Raritan River Greenway Marketing and Preservation

The Regional Center Partnership and Somerset County should work together jointly on the development of Raritan River Greenway marketing and preservation initiatives that strive to promote the recreational, historic and cultural values of the Raritan River Greenway. A significant source of potential funding may be available for initiatives that support heritage and environmental tourism marketing and historic preservation. Examples include DEP Grants for Local Environmental Agencies, Regional Center Partnership grants; DEP Watershed Management Public Education; NJ Historical Commission Grants to Support NJ History; Historic Preservation Certified Local Government Grants and Historic Preservation Revolving Loan Program.

Peters Brook Greenway

Peter's Brook provides an important opportunity for extending the Regional Center's natural greenway system in a north/south direction to connect with and complement the Raritan River's east/west orientation. Portions of Peters Brook are already contained within local parks and open space areas within Somerville. Identifying and preserving remaining connections along the entire greenway path will strengthen this north/south link and provide an enhanced natural connection between Bridgewater and Somerville. Completing the linkages in this greenway will provide important recreation and pedestrian connection opportunities for both Bridgewater and Somerville, which could be accessed by Raritan through connections with the Raritan River Greenway.

Peters Brook Greenway

The Peters Brook greenway system may also be expanded and enhanced through inclusion of portions the Ross Brook, which is east of Peters Brook but connects with it near William Street.

Easements along this Brook to protect wildlife habitat, viewsheds and water quality are recommended.

The connection and extension of both greenways is encouraged. A greenway plan similar to that already established for the Raritan River should be developed to protect this important resource and provide a much-needed additional recreational amenity within the Center. Implementation recommendations similar to those identified for the Raritan River Greenway and found in the Somerville Borough Master Plan should be pursued.

Open Space Tax/Open Space Trust Fund

The Boroughs of Raritan and Somerville should evaluate the benefits of adopting an open space tax. This tax would permit the Boroughs to access a wide array of funding sources for land preservation and would improve the ability of the Regional Center as a whole to leverage funding for open space acquisition and preservation.

This tax would permit Raritan and Somerville to establish trust funds for open space. Monies from the trust fund could be used for acquisition, development, maintenance, and historic preservation. In developed municipalities such as Raritan and Somerville, the ability to use the funds for maintenance is important, particularly given that the preserved open space in both municipalities may increase under various redevelopment proposals.

Local Ordinance Review

An important short term project recommended in the Strategic Plan is for the communities to all undertake a review of their environmental regulations. The objective is to update all local regulations to account for current stormwater management and flood control requirements, water quality requirements and incorporate best management practices. Improvements in storm water management techniques will improve water quality, minimize bank erosion and enhance recreational opportunities. Funding for this project could be available from Smart Growth Planning grants, NJ Tree Planning grants and USEPA Green Communities program.

Green Plan

This Strategic Plan recommends that the municipalities cooperate with Somerset County to develop an overall "Green Plan" which would cover all aspects of environmental planning and "green infrastructure" management. The plan would also include an inventory of the natural systems within the Regional Center and would address issues such as tree cover, ecosystem restoration, nonpoint source pollution control, and land acquisition. The plan would serve an important role in bringing together a number of disparate efforts, including redevelopment plans and proposals, the Raritan Basin Watershed Management Project, streetscape and bicycle/pedestrian pathway planning, the Raritan River and Peters Brook Greenways. The plan could be modeled on the USEPA's Green Communities program and would improve the Regional Center's ability to apply for state grants and loans for open space.

Shared Services/Community Facilities/Cultural and Historic Resources

Shared Services

The municipalities within the Regional Center should continue their legacy of sharing resources and facilities by pursuing potential new shared-service opportunities in various areas such as public safety, parks, recreation and open space shared services, libraries and public works. All three communities are currently members of the Shared Services Council and should continue to participate in the Shared Serviced Coordinating Council of the Somerset County Business Partnership to advance shared service opportunities.

Bridgewater Public Library

A number of state-level funding sources are available to assist communities in examining and embarking on shared- service agreements. These include NJDCA Joint Services Incentive Grants. For public safety shared-services agreements, assistance is available through the Division of Criminal Justice's Local Law Enforcement Block Grants.

Infrastructure Capacity Study

The Strategic Plan recommends that Somerville and Raritan undertake an Infrastructure Capacity Study to identify if there is adequate capacity in these municipalities to handle proposed new development. The objective of the study would be to determine whether development of Somerville and Raritan will require additional expenditures on water and sewer infrastructure and if infrastructure is sufficient to handle growth. This project should be pursued jointly by Somerville and Raritan with the Regional Center Partnership. Potential funding for this study is available from the Rutgers Center for Neighborhood and Brownfields and Environmental Infrastructure Financing Program.

Somerset Medical Center

An ad hoc regional planning effort could help provide solutions to the Somerset Regional Medical Center's expansion needs while improving health care for everyone in the Regional Center and remaining sensitive to land use and tax base issues in the Borough of Somerville. The Regional Center Partnership and member municipalities should work with the Medical Center to determine a long-term solution to expansion. Potential planning funding sources for this initiative include local planning assistance grants.

Somerset Medical Center

Regional Community Center

The Regional Center Partnership has expressed strong interest in developing a Regional Community Center. This concept should be explored further, starting with a definition of joint community center needs that could be met at a shared community center. For example, community meeting space, senior activities, cultural exhibit space, etc.

It is recommended that a site be identified for this center as soon as possible and that plans for development and construction proceed over the intermediate to long term. It is recommended that Somerset County become involved in the development of this Center through the newly created Somerset County Improvement Authority, which can provide the financing for such a project.

Historic Resource Protection Analysis

The Strategic Plan recommends that Bridgewater, Somerville and Raritan each undertake a Historic Resource Protection Analysis. This local analysis should examine municipal regulatory language and actions with regard to protection, revitalization and adaptive reuse of historic and architecturally significant sites and districts. Each community's regulations should be amended to ensure that whenever possible, historic resources are protected during the development process.

Van Horne House, Bridgewater

Cultural and Historic Support

It is recommended in the Strategic Plan that the communities identify existing cultural and historic resources within the Regional Center in order to increase public awareness and define methods for enhancing and/or creating new cultural and historic opportunities.

IMPLEMENTATION AGENDA MATRIX

The Implementation Agenda matrix outlines major specific projects/actions which may be accomplished to promote Regional Center goals and objectives discussed in this document. This is not an all-inclusive list and other projects/actions may be added as need and opportunity allow. Included are anticipated schedules for completion, potential funding sources and participating entities. For the purposes of this schedule, "short term" shall be considered between 1 and 5 years, "intermediate term" shall be considered between 5 and 10 years and "long term" shall be considered 10 years and over. Scheduling of specific projects may also shift as funding and other opportunities present themselves.

Downtowns and Main Streets

Name of Project	Location	Action	Description	Responsibility (Listed in order)	Schedule	Funding Sources
Residential Living Downtown	Downtown Raritan and Downtown Somerville	Implement Upstairs Downtown program.	Promote additional housing in downtowns by increasing feasibility of living downtown through Upstairs Downtown mortgage assistance program.	Municipal governments	Short to intermediate term	Upstairs Downtown Mortgages (NJDCA), Historic Preservation Tax Credits
Main Street Assistance	Downtown Raritan and Finderne Commercial Core	Develop Main Street programs in downtown Raritan and the Finderne commercial core.	Develop Main Street programs to address streetscape, signage, facades, business assistance, etc.	Municipal governments Regional Center Partnership	Intermediate to long term	Main Street NJ Technical Assistance
Special Improvement Districts (SIDs)	Downtown Raritan	Establish Special Improvement Districts in downtown Raritan.	DCA-sponsored program that permits a special tax levy on businesses within the district. Revenues go toward marketing, maintenance, security, upgrades, etc.	Municipal government	Intermediate to long term	Self-funded, NJDCA, SID Challenge Grants and Loans
Finderne CBD Study	Finderne Commercial Core	Conduct revitalization study that includes facade improvements for commercial properties at the heart of Finderne.	Provides opportunity to promote design standards and more walkable environment with upgraded retail, boosting the desirability of Finderne for residents and businesses.	Municipal government	Intermediate term (study) to long term (implementation)	NJ Redevelopment Authority Loans, RCP, County Grant

Redevelopment Areas, Economic Development and Community Design						
Name of Project	**Location**	**Action**	**Description**	**Responsibility (Listed in order)**	**Schedule**	**Funding Source**
Somerville Landfill	Somerville	Complete Redevelopment Plan.	Complete mixed-use redevelopment plan for the site including residential and commercial components. Redevelop site with strong connections to downtown Somerville. Apply to NJDOT Transit Village designation.	Municipal government NJ Transit	Short term (redevelopment)	Tax Increment Financing, County Grant, State Grant Funding, HDSRF(Hazardous Discharge Site Remediation Fund), NJ Redevelopment Authority, NJ Commerce, Economic Growth Brownfield Incentive funding, NJDOT Local Aid for Centers of Place, Livable Communities Grants, Transit Village Initiative
Downtown Somerville Shopping Center	Somerville	Amend Redevelopment Plan and begin site redevelopment.	Redevelop shopping center site to maintain essential services in downtown area while expanding downtown. Design for future connection to Somerville Landfill site.	Municipal government	Short term (redevelopment)	NJ Redevelopment Authority Loans, Tax Increment Financing
Somerville Eastern Central Business District	Somerville	Complete and adopt Redevelopment Plan.	Redevelop areas of district for mixed retail, office, services and residential use.	Municipal government	Short term (plan)	NJEDA Bond Financing, NJEDA Direct Loans/Loan Guarantees, NJ Redevelopment Authority loans
Kirby Avenue	Somerville	Complete and adopt Redevelopment Plan.	Redevelop vacant industrial buildings, known as former Baker & Taylor site.	Municipal government	Short term (plan)	NJ Redevelopment Authority Loans, Tax Increment Financing

Wyeth Site (American Cyanamid)	Bridgewater	Study and redevelop site, including substantial recreation and open space opportunities.	Develop sub-area plan for site in which appropriate redevelopment options are identified.	Municipal government Somerset County	Short term to intermediate term (plan) to long term (redevelopment)	NJ Redevelopment Authority Loans, Environmental Opportunity Zone (TIF), Hazardous Site Discharge Remediation Fund, USEPA Brownfield Programs, Sustainable Development Challenge Grant, Project XL, DEP Voluntary Cleanup Program, State Brownfield Assistance program
Orlando Drive Corridor Study	Raritan	Perform comprehensive analysis of current conditions and develop a vision for future redevelopment.	Identify environmental assets along the river, develop community consensus on the future of the corridor, explore options for integration with Landfill redevelopment and Duke Estate.	Municipal government	Short term	RCP, MLUC Grant
Johnson Drive Corridor	Raritan	Utilize redevelopment process to encourage more appropriate uses for the sites.	Promote redevelopment appropriate for the sites.	Municipal government	Long term	NJEDA Consulting Assistance for Manufacturers, NJEDA Bond Financing, NJEDA Direct Loans/Loan Guarantees, Sustainable Development Loan Fund
New Redevelopment Areas Identification	Bridgewater, Somerville and Raritan	Identify any new areas that are "in need of redevelopment".	Perform preliminary redevelopment investigations on areas that may benefit from redevelopment.	Municipal governments	Ongoing	RCP, County Grants, State Grants
Commercial/Mixed Use Design Standards	Downtown Somerville and Downtown Raritan	Develop illustrated design standards in zoning ordinance.	Establish design standards for infill commercial.	Municipal governments	Short term	Local Planning Assistance
Residential Design Standards	Select Residential neighborhoods throughout the Regional Center	Develop graphically illustrated design standards in the zoning ordinance for infill residential development.	Provide clear, understandable design guidelines for infill development in each municipality's zoning ordinance.	Municipal governments	Intermediate term	Municipalities

Train Station Areas						
Transit Village Initiative	Raritan Train Station	Apply to NJDOT transit village designation.	Prepare an application to develop mixed-use village centers around train station, where appropriate.	Municipal government Regional Center Partnership	Short term to intermediate term	NJDOT Local Aid for Centers of Place, Livable Communities Grants, Transit Village Initiative
Third Street Redevelopment Study	Third Street, Raritan	Conduct redevelopment study for industrial area adjacent to Train Station.	Opportunity to further the redevelopment of Downtown Raritan and increase use of the Train Station.	Municipal government	Intermediate term	NJ Redevelopment Authority Loans, NJDOT Transit Village Initiative
Neighborhoods and Housing						
Name of Project	**Location**	**Action**	**Description**	**Responsibility (Listed in order)**	**Schedule**	**Funding Source**
Neighborhood Plans	Finderne and Medium-Density Residential Neighborhoods in Somerville	Conduct charrette-driven neighborhood planning processes.	In each neighborhood, address issues of development, parks and recreation, circulation, connections, and community facilities.	Regional Center Partnership Municipal governments	Short term to intermediate term	NJDCA Neighborhood Preservation Grants, NJHMFA 100% Mortgage Program, HOME Neighborhood Preservation financial assistance, DCA Adopt-a-Neighborhood, County CDBG funds, Revitalization Tax Credits, USEPA Office of Environmental Justice Small Grants, RCP
Senior Housing Opportunities Study	Bridgewater, Raritan and Somerville	Study housing and access opportunitites for seniors.	A study to identify new housing opportunities for seniors and access and circulation issues within the Regional Center.	Municipal governments Regional Center Partnership	Short term to intermediate term	County Municipal Planning Partnership Grants, Regional Center Challenge Grants

Joint Housing Initiatives	Bridgewater, Raritan and Somerville	Examine potential for pursuing joint housing initiatives like shared RCA's.	The Regional Center municipalities may consider whether taking a regional approach to this issue would be mutually beneficial.	Municipal governments	Short term to intermediate term	County Municipal Planning Partnership Grants, Regional Center Challenge Grants, State Smart Growth Planning Grants
Circulation						
Name of Project	**Location**	**Action**	**Description**	**Responsibility (Listed in order)**	**Schedule**	**Funding Source**
Route 28 Corridor	Somerville and Bridgewater	Implement results of the needs assessment study.	Install new sidewalks and bus shelters. Modify signal timing.	Somerset County Municipal governments	Short term	NJDOT, Somerset County
Somerville Circle	Raritan and Bridgewater	Implement traffic study of the circle.	A study looking at volumes and accidents should be done to reconfigure the remaining circle for better traffic flow and safety.	NJDOT Regional Center Partnership Municipal governments	Intermediate term	NJDOT, Federal sources
Route 202 Corridor	Bridgewater and Raritan	Implement corridor study.	A build out and access management study should be performed for better traffic flow and long term implications of build out.	Regional Center Partnership Municipal governments	Intermediate term	NJDOT, Somerset County
Route 22 Suburban Boulevard Plan	Bridgewater and Somerville	Implement the "Somerset County Regional Center Route 22 Sustainable Corridor Plan, July 2001".	Work with property owners to consolidate driveways and eliminate at-grade crossings to improve safety.	Regional Center Partnership Somerset County	Intermediate term to long term	NJTPA TIP funding, State and Federal sources
Routes 287, 202/206 and 22 Interchange(s)	Bridgewater	Reducing congestion and accidents.	Other modes and small lane reconfiguration strategies should be studied in order to maximize existing infrastructure.	NJDOT Municipal government Regional Center Partnership	Intermediate term to long term	NJDOT, Federal Highway funds, Somerset County

Chimney Rock Road	Bridgewater	Implement plans.	Encourage all new projects to accommodate transit and/or BRT technologies.	Regional Center Partnership Municipal government	Ongoing during development review	Private funds
Regional Center Traffic Calming Plan Implementation	Selected Neighborhoods and Priority Areas in the Regional Center	Implement measures where appropriate.	Create traffic calming "tool box". Conduct education and outreach program. Develop pilot plans.	Regional Center Partnership	Short term	Municipal, Somerset County
Coordination of Road Improvements	Somerset County, Bridgewater, Raritan and Somerville	Ensure all road projects are considered in context of adjoining land uses.	Talk to all interested parties during all phases of a road project. Ensure all modes of transportation are considered for every transportation project.	NJDOT Somerset County Municipal governments	Ongoing	NJDOT, Somerset County, municipalities
Access Management	Somerset County, Bridgewater, Raritan and Somerville	Encourage access management principles on all roads.	Consolidate commercial driveways along high volume corridors. Eliminate four-lane no shoulder; no left hand turn lane cross sections.	NJDOT Somerset County Municipal governments	Ongoing	NJDOT, County, municipalities
Bicycle Facilities Master Plan/Network	Regional Center	Prepare a Bicycle Study/Master Plan for the Regional Center and implement the bicycle facility network.	Study bicycle suitability, demand analysis and needs assessment. Encourage bicycle compatibility on all roads where appropriate.	Regional Center Partnership Somerset County Municipal governments	Short to intermediate term	NJDOT Planning Assistance programs, Private health funding, Federal Enhancement funds, NJDOT local aid (earmarked bicycle facility funds), Municipal funds, County funds, Developer contributions, Employer contributions (on-site improvements)

Pedestrian Facilities Assessment and Improvement Plan	Somerville, Raritan and Bridgewater	Prepare and implement municipal Pedestrian Improvement Plans and inventory existing sidewalks and connections.	Undertake a Pedestrian Facilities inventory and needs assessment. Implement Safe Routes to School program. Make all sidewalks and road interfaces ADA compatible. Make areas within ½ mile of transit stops and ¼ mile of bus stops both pedestrian and bicycle friendly.	Somerset County Municipal governments Regional Center Partnership	Short to intermediate term	NJDOT Planning Assistance programs, Private health funding, Federal Enhancement funds, NJDOT local aid (earmarked pedestrian funds), Municipal funds, County CDBG funds, Developer contributions, Regional Center Partnership
Greenway/Shared Use Path Implementation	Raritan River, Peters Brook, Middle Brook and North Branch	Study bicycle and pedestrian facility feasibility and design. Implement bicycle and pedestrian facility phased construction.	Prepare study to determine the feasibility and preferred option for a greenway/shared use path. (e.g. Raritan greenway, commuting and recreation)	Regional Center Partnership Somerset County Park Commission	Short to intermediate term	County Park Funds, Open space funds for acquisitions of outparcels, Federal Enhancement dollars, NJDOT local aid
Accommodate Freight Movements	Regional Center	Identify appropriate truck routes. Coordinate with County Freight Study.	Locate warehouse facilities along existing rail infrastructure. Improve at grade rail crossings. Identify truck routes. Avoid schools and other high pedestrian areas.	Municipal governments	Intermediate term	Municipal, Somerset County, NJDOT
Extend Local NJ Transit Service to New York City	Somerville, Raritan and Bridgewater	Extend the 117 Bus line.	Petition NJ Transit to extend the 117 Bus line to include Raritan at Somerset Street and the Bridgewater Commons.	Municipal governments Somerset County Regional Center Partnership	Short term	
Extend Local NJ Transit	Somerville	Extend local NJ transit service in Downtown Somerville and to the Landfill Redevelopment site.	Petition NJ Transit to extend Transit Service within Somerville.	Municipal government Somerset County Regional Center Partnership	Short term	

Recreation, Open Space, and Natural Systems						
Name of Project	**Location**	**Action**	**Description**	**Responsibility (Listed in order)**	**Schedule**	**Funding Source**
Torpey Athletic Complex Expansion	Bridgewater	Create a Regional Center shared recreation facility.	Develop county-owned parkland to address Regional Center recreational needs.	Somerset County Municipal governments Somerset County Parks Commission	Short to intermediate term	Smart Growth Planning Grants, NJ Tree Planting Grants, USEPA Green Communities program
Raritan River Greenway Master Plan	Raritan River, North Branch	Undertake strategic planning and land acquisition.	Somerset County should continue to implement master plan for Greenway with input from Regional Center Partnership.	Somerset County	Short to intermediate term (ongoing)	Somerset County, Nonpoint source pollution control and management grants, Green Acres, Garden State Preservation Trust in-lieu-of-tax payment program, NRCS Small Watershed Program
Raritan River Greenway Master Plan Wyeth Site	Southern Wyeth Site, Bridgewater Somerville, Raritan and Bridgewater	Undertake strategic land acquisition and cleanup.	Extensive environmental cleanup will be required to convert this former industrial site into a component of the Raritan River Greenway. Should be undertaken in conjunction with redevelopment of northern part of site. Greenway should be extended to include minor tributaries within Regional Center. Regional Center Partnership and municipalities should actively participate in planning the greenway.	Municipal governments Regional Center Partnership Somerset County	Short to long term	Green Acres Grants, Hazardous Discharge Site Remediation Fund, USEPA Sustainable Development Challenge Grants, USEPA Project XL, DEP Grants for Local Environmental Agencies, Watershed management, Nonpoint source pollution control grants, Garden State Preservation Trust in-lieu-of-tax payment program, NRCS Small Watershed Program

Raritan River Greenway Master Plan Somerville Landfill Site	Somerville Landfill Site	Enhance connections to lands West of Route 206 including the Duke Estate.	Provide physical connections and signage to adjacent greenways and open space.	Somerset County	Short to long term	Somerset County, NJDEP National Recreational Trails Program
Raritan River Greenway Master Plan Connections & Signage	Raritan River	Enhance connections to East Coast Greenway, D & R Canal State Park.	Provide physical connections and signage to adjacent greenways.	Somerset County	Short to long term	Somerset County, NJDEP National Recreational Trails Program
Raritan River Greenway Marketing and Preservation	Raritan River	Undertake heritage and environmental tourism marketing and historic preservation.	Regional Center Partnership should promote the recreational, historic, and cultural values of the Raritan River Greenway.	Regional Center Partnership Somerset County	Short to intermediate term	DEP Grants for Local Environmental Agencies, Regional Center Partnership, DEP Watershed Management Public Education, NJ Historical Commission Grants to Support NJ History, Historic Preservation Certified Local Government Grants, Historic Preservation Revolving Loan Program
Peters Brook Greenway	Peters Brook Greenway	Develop a Greenway Plan to protect the Peters Brook Greenway and provide additional recreational amenity to the Regional Center.	Identify and preserve connections along the Peters Brook Greenway.	Somerset County	Short to intermediate term	Somerset County, Nonpoint source pollution control and management grants, Green Acres, Garden State Preservation Trust in-lieu-of-tax payment program, NRCS Small Watershed Program
Open Space Tax/Open Space Trust Fund	Somerville and Raritan	Institute a ½-cent open space tax.	Institute a one-half cent open space tax to kick-start an open space trust fund and provide leverage for state funding of open space development and acquisitions.	Municipal governments	Short to intermediate term	Municipal governments

Local Ordinance Review	Regional Center-wide	Improve stormwater management, flood control measures, water quality requirements and best management practices.	Review ordinance requirements and update to account for current stormwater management and flood control requirements, water quality requirements and incorporate best management practices.	Somerset County Municipal governments	Short term	Smart Growth Planning Grants, NJ Tree Planting Grants, USEPA Green Communities program
Green Plan	Regional Center-wide	Create a Green Plan for the Regional Center, potentially in conjunction with the rest of the county.	Develop a plan that incorporates all aspects of park, open space, and natural systems planning. Include inventory of natural systems.	Somerset County	Short to intermediate term	Smart Growth Planning Grants, NJ Tree Planting Grants, USEPA Green Communities program
Shared Services, Community Facilities, and Historic and Cultural Resources						
Public Safety	Regional Center-wide	Consider sharing components of emergency services.	Consider developing joint emergency services and emergency service facility that could be shared among the municipalities.	Municipal governments	On-going	Div. of Criminal Justice Local Law Enforcement Block Grants, NJDCA Joint Services Incentive Grants
Parks, Recreation, and Open Space Shared Services	Somerville, Raritan and Bridgewater	Consider sharing components of parks and recreation.	Explore potential to consolidate programs and share equipment, facilities, and maintenance operations.	Municipal governments	On-going	NJDCA Joint Services Incentive Grants
Libraries	Regional Center-wide	Increase coordination between libraries.	Consider coordinating collections and programming among the three libraries.	Municipal governments	Intermediate term	NJDCA Joint Services Incentive Grants
Public Works	Raritan and Somerville	Increase public works shared services.	Consider utilizing joint maintenance facilities for public works.	Municipal governments	Long term	NJDCA Joint Services Incentive Grants
Infrastructure Capacity Study	Somerville and Raritan	Study capacity of infrastructure to handle development.	Determine whether development of Somerville and Raritan will require additional expenditures on water and sewer infrastructure. Determine if infrastructure is sufficient to handle growth.	Municipal governments Regional Center Partnership	Short term	Rutgers Center for Neighborhood and Brownfields, Environmental Infrastructure Financing Program

Somerset Medical Center	Somerville	Develop regional plan for medical center expansion.	Regional Center Partnership, Somerville and Somerset County should work with Medical Center to develop a long range plan that will address needs of the Medical Center and the neighborhoods.	Municipal governments Somerset County Regional Center Partnership	Short term to intermediate term (study) and intermediate to long term (action)	Local planning assistance
Regional Community Center	Regional Center central area	Conduct a needs analysis for a regional community center.	Establish needs and desired facilities. Provide a forum for regional arts, cultural, and recreation events. Location should be within central area of Regional Center with good multi-modal connections.	Regional Center Partnership Municipal governments	Short term to long term	Regional Center Partnership, Municipal governments, Somerset County
Historic Resource Protection Analysis	Bridgewater, Somerville and Raritan	Analyze local historic resource protection regulations.	Examine municipal regulatory language and actions with regard to protection, revitalization, and adaptive reuse of historic and architecturally significant sites and districts. .	Municipal governments Somerset County State Historic Preservation Office Regional Center Partnership	On-going	Regional Center Partnership, Municipal governments, Somerset County, State Historic Preservation Grant Programs
Cultural and Historic Support	Bridgewater, Somerville and Raritan	Promote cultural and historic activities and resources within the Regional Center.	Identify existing cultural and historic resources within the Regional Center. Increase public awareness and define methods for enhancing and/or creating new cultural and historic opportunities.	Municipal governments Somerset County State Historic Preservation Office Regional Center Partnership	On-going	Regional Center Partnership, Municipal governments, Somerset County, State Historic Preservation Grant Programs

LAND USES AND ZONING ALONG MUNICIPAL BORDERS

The land uses and zoning in Bridgewater, Raritan and Somerville are varied throughout the Regional Center. The following map, Figure 7 Regional Center Zoning & Joint Planning Opportunities, depicts the diversity of zoning currently in place in the Regional Center. Important differences and similarities in zoning exist along the municipal borders. A detailed review of zoning along the municipal borders is included in this Strategic Plan in order to identify potential opportunitites for joint planning initiatives.

Land Uses and Zoning along the Bridgewater/Raritan Borders

South East Bridgewater and South West Raritan Border North of Raritan River and South of Rail Road Tracks

The zoning in Bridgewater north of the Raritan River and south of Old York Road includes a small area zoned C-1 Neighborhood Business. Even though this area in Bridgewater is outside the borders of the Regional Center, it is still relevant to review since there may be opportunitites for the communities to work together to foster linkages and/or minimize any existing conflicts.

In Raritan, the zoning in this area is M-1 Light Manufacturing District. The communities may want to encourage a partnership between these two sites for things such as shared parking, access management improvements and landscape buffering since both these areas are small and isolated from similar type uses.

North of Old York Road up to the Rail Road tracks the zoning in Bridgewater changes to R-10 Single Family Residential. This area, which includes the Bradley Gardens neighborhood, is also located outside the boundaries of the Regional Center.

In Raritan, the zoning north of Old York Road up to the Rail Road tracks changes to G-1 Governmental Uses District. Within this area north of Helene Place is a small residential area on Obert Drive zoned R-3 Medium Density Residential District. Given that this residential area in Raritan is small and isolated, opportunitites may exist for linkages with the residential area in Bridgewater and adjacent neighborhoods in Raritan through the creation of sidewalks or crosswalks.

Old York Road, Raritan

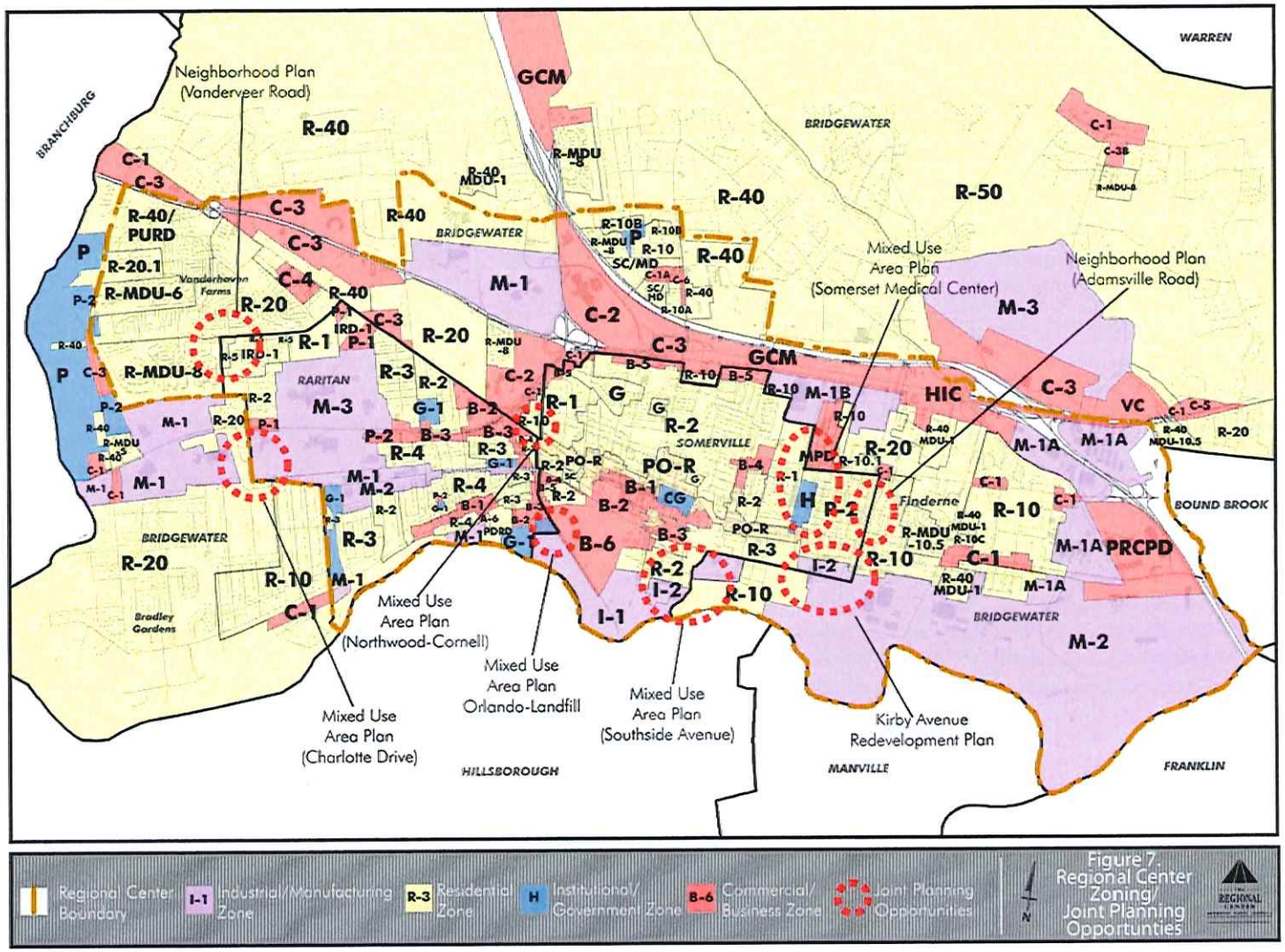


Figure 7
Regional Center Zoning/ Joint Planning Opportunities

The Johnson Drive Corridor Redevelopment site in Raritan is located north east of the small residential area on Obert Drive. This area is zoned M-3 and is located relatively close to the Bridgewater border. Although the expected schedule for redevelopment of this site is long term, Bridgewater should be invited to participate in the redevelopment plans of this important site. Efforts should be directed towards ensuring that the Bradley Gardens neighborhood in Bridgewater and the surrounding residential neighborhoods in Raritan are considered in the development process and are not impacted by any new development and possible increases in traffic or noise.

Johnson Drive, Raritan

South East Bridgewater and South West Raritan Border
North of Rail Road Tracks and South of Route 202

The land use in Bridgewater north of the Rail Road tracks and south of Route 202 adjacent to the Raritan border includes a small area of existing residential located on Charlotte Drive and zoned R-20 Single-Family Residential. This residential area is adjacent to industrial lands in Raritan zoned M-3 Limited Industrial District. Opportunitites may exist in Raritan to help minimize the impacts of the industrial uses on the nearby residential by encouraging the erection of buffers, noise walls and/or landscaping.

East Bridgewater and West Raritan Border
North of Route 202 South of Vroom Drive/Normandie Lane

The lands in Bridgewater immediately north of Route 202 adjacent to the Raritan border include a small area of existing residential zoned R-20 Single-Family Residential on Edgewater Terrace. This area is adjacent to a small area in Raritan zoned P-1 Office Building District. Bridgewater and Raritan should explore ways to ensure the existing residential area in Bridgewater is not impacted by the nearby office uses in Raritan. North of this site in Raritan is an area of existing residential zoned R-2 Medium Density Residential District on Alpine Way. This area could be linked to the existing residential development in Bridgewater by the preparation of joint neighborhood plans.

The area in Bridgewater west of the above mentioned residential development is zoned M-1 Limited Manufacturing. This area abuts the western border with Raritan were existing residential development is located. Opportunitites may exist in Bridgewater to ensure the surrounding residential development in both Bridgewater and Raritan are protected from this nearby manufacturing activity by encouraging buffers and landscaping.

North East Bridgewater and North West Raritan Border South and North of Vanderveer Road

South of Vanderveer Road in Bridgewater is a relatively large area of existing residential zoned R-MDU 8 Multi-Family Residential. North of Vanderveer Road up to and including all the lands south west of Route 28 the zoning in Bridgewater changes to R-20.1 Single Family Affordable Residential District.

Vanderveer Farms Residential Area, Bridgewater

Residential land uses also exist in Raritan south of Vanderveer Road. The zoning in this area varies from IRD-1 Inclusionary Residential District, R-5 Townhouse/Garden Apartment Density District and R-1 Low Density Residential District. The municipalities could work together on joint neighborhood plans to foster links between these two residential areas and encourage the sharing of facilities like parks and other important neighborhood amenities.

North East Bridgewater and North West Raritan Border East and West of Route 28

A variety of land uses and zoning exist in Bridgewater on the east side of Route 28. At the Vanderveer Road/Route 28 intersection the zoning is R-40 Single-Family Residential. In addition, a small cemetery is located in the area. Adjacent to the cemetery, is a small commercial area zoned C-3 Office and Service. Next to this, is the Raritan Valley County Club which is zoned R-20 Single-Family Residential. The Somerset Shopping Center is located at Somerville Circle intersection and is zoned C-2 Regional Retail Business.

A diverse array of land uses also exist in Raritan on the west side of Route 28. Beginning at the Vanderveer Road/Route 28 intersection is small area zoned P-1 Office Building District. This is adjacent to an existing residential development zoned R-3 Medium Density Residential District located on the west side of Route 567. On the east side of Route 567 the zoning changes to R-2 Medium Low Density Residential District. The zoning at the Somerville Circle intersection includes B-2 Shopping Center District and B-3 Highway Business District.

While a variety of land uses and zoning exist in both Bridgewater and Raritan in this area, Route 28 serves as a buffer between any conflicting uses. The communities may want to work together to help enhance linkages across Route 28 between some uses such as the existing residential development in Raritan and the commercial and open space uses located in Bridgewater by the installation of new sidewalks and pedestrian crosswalks.

Land Uses and Zoning along the Bridgewater/Somerville Borders

South East Bridgewater and West Somerville Border
East of Route 202 and North of Route 28

On the east side of Route 202 north of Route 28 is a small area of residential development on Northwood Avenue in Bridgewater zoned R-10 Single-Family Residential. North of this is a small area zoned C-1 Neighborhood Business. The area adjacent in Somerville includes a small area zoned PO-R Professional Office Residential District and an existing residential area zoned R-1 Single Family Residence District.

Bridgewater and Somerville should work together to find ways to enhance linkages between these two existing neighborhoods. This is particularly important for the residents in Bridgewater which are isolated from the rest of the community by the Somerville Circle and Routes 202 and 28.

Somerville Circle

Connecting sidewalks and bicycle paths could be installed to encourage access to key neighborhood sites such as the Immaculate Conception School and commercial uses along Route 28 in Somerville. Both communities may also want to encourage the existing businesses in the area to make landscaping and other buffering improvements to help minimize the impacts on the neighboring residents.

South East Bridgewater and West Somerville Border
Route 202/Route 22 Intersection

The zoning in Bridgewater adjacent to the Somerville border in and around the Route 202/Route 22 intersection includes one area located on the west side of Route 202 zoned C-2 Regional Retail Business and a small area on the east side of Route 202 zoned C-1 Neighborhood Business. The area adjacent to this in Somerville is similarly zoned as B-5 Highway Business District. Bridgewater and Somerville should continue to work together with each other and Raritan to ensure traffic concerns are minimized in this area and that customers can safely access the existing businesses. For example, access management improvements like shared driveway access and connected parking areas could be jointly pursued to help improve safety.

South Bridgewater and North Somerville Border
North and South of Route 22

The land uses and zoning in both Bridgewater and Somerville along Route 22 are very similar. On the north side of Route 22 the zoning in Bridgewater includes a large area zoned C-2 Regional Retail Business where the Bridgewater Mall is located and a small area zoned C-3 Office and Service.

C-3 Office and Service Use, Bridgewater

All of the lands in Somerville located on the south side of Route 22 are zoned B-5 Highway Business District which permits similar uses to those existing in Bridgewater.

Adjacent to the area in Somerville zoned B-5 is a large residential area zoned G Garden Apartment District and R-2 Single Family Residence District. Within this area is the Somerville High School. Access across Route 22 to the Bridgewater Mall by residents and students is now provided by the newly constructed pedestrian walkway. The erection of this walkway has eliminated many safety concerns and helped enhance the linkages between Bridgewater and Somerville. Other opportunitites may exist for both Bridgewater and Somerville to ensure this residential area in Somerville is not negatively impacted by the adjacent highway businesses on Route 22. For example, improvements in landscaping and other buffering techniques could be encouraged.

Route 22 Pedestrian Bridge, Bridgewater

South Bridgewater and North Somerville Border
East North Bridge Street and East North Gaston Ave

There are two small areas in Bridgewater on the south side of Route 22 that are currently zoned R-10 Single Family Residential. The first site, located on the east side of North Bridge Street, is the current location for the Business Partnership of Somerset County. The second site, located on the east side of North Gaston Ave, is presently undeveloped.

If these two sites are ever developed for residential uses efforts should be directed towards linking these sites with adjacent existing neighborhoods in Somerville zoned R-2 Single Family Residence. A joint neighborhood plan which encompasses the entire residential area could be prepared by Bridgewater and Somerville.

These areas are also adjacent to lands zoned B-5 Highway Business District in Somerville. Opportunitites may exist for

Somerville to encourage the protection of these residential areas from noise and traffic resulting from the nearby commercial uses.

South Bridgewater and North Somerville Border
West and East of Vanburen Road

The area in Bridgewater north of Route 28 and west of Vanburen adjacent to the Somerville border is zoned M1-B Limited Manufacturing (Small Lot). Immediately south of this area the zoning in Somerville is R-2 and R-1 Single Family Residential. Of particular note is that the Van Derveer Elementary School which is located at the north east corner of the Somerville border with Bridgewater. Opportunitites may exist in Bridgewater to provide buffers between any existing manufacturing uses and the existing residential area and school. Special attention should be directed towards insuring the elementary school is not impacted by traffic or noise.

The area in Bridgewater east of Vanburen north of Route 28 is zoned MPD Medical Park District. The area immediately south of this in Somerville is zoned R-2 Single Family Residence. Located within this neighborhood is the Somerset Medial Center. The communities of Bridgewater and Somerville should work together on any plans for this site since it could impact residential neighborhoods in both communities. A joint neighborhood plan could be prepared that provides specific recommendation on how to lessen the impacts the hospital related uses may have on existing neighborhoods and resolve any existing concerns such as parking and traffic.

Somerville Medical Center Neighborhood

West Bridgewater and East Somerville Border
West and East of Adamsville Road

Similar land uses exist in Somerville and Bridgewater west and east of Adamsville Road. A large residential area zoned R-2 Single Family Residence exists in Somerville on the west of Adamsville Road. The adjacent area in Bridgewater west of Adamsville Road and north of Route 28 is zoned R-10.1 and R-20 Single Family Residential. The zoning changes on the east side of Adamsville Road south of Route 28 to R-10 Single Family Residential.

The communities may want to pursue undertaking joint neighborhood plans in this area to improve connections and sharing of facilitates. A small commercial site zoned C-1 Neighborhood Business is located in Bridgewater at the north west corner of Route 28 and Adamsville Road. Opportunitites may exist in Bridgewater to encourage enhanced landscaping and buffering of this site so it does not impact nearby

residential development. Both communities may want to investigate enhancing connections to this site by the installation of sidewalks and bicycle paths.

The lands in Somerville at the southern end of Adamsville Road adjacent to the Rail Road tracks along Kirby Avenue are currently zoned 1-2 Industrial District. This area, know as the Baker Taylor site, is proposed for redevelopment. Efforts should be made to ensure this new area is connected, if appropriate, to the existing neighborhood to the north in Somerville and the residential area in Bridgewater on the west side of Adamsville Road.

Baker Taylor Site, Somerville

A small area in Bridgewater zoned M-2 General Manufacturing exists adjacent to the Rail Road tracks on the east side of Adamsville Road along Central Avenue. This site will be the only remaining industrial uses in this area north of the Rail Road tracks once the Kirby Avenue area is redeveloped. Opportunitites may exist in Bridgewater to encourage landscaping and buffering around the site to protect nearby residential development in both Somerville and Bridgewater.

South Bridgewater and South Somerville Border North and South of the Rail Road Tracks

A variety of zoning is in place in Bridgewater north of the Raritan River and south of the Rail Road tracks. A large area zoned M-2 General Manufacturing exists west and east of Finderne Avenue. Next to this on the west side is an area zoned R-10 Single Family Residential. Within this area is the Torpey Recreational Center, a farm and a small residential area. The zoning changes north of Southside Avenue up to the Rail Road tracks to M-2 General Manufacturing.

The zoning and land uses in Somerville in this area are also varied. The zoning north of the Rail Road tracks adjacent to the Kirby Avenue Redevelopment site includes a large area zoned R-3 Single Family Residence. South of the Rail Road tracks on the west side of Peters Brook the zoning changes to R-2 Single Family Residence. South of this area adjacent to the Raritan River the zoning changes to I-2 and I-1 Industrial District.

Given there are so many different types of land use and zoning in this area Bridgewater and Somerville may want to investigate pursing a joint plan. Particular attention should be directed to examining the Torpey Recreational Center since it is a major resource in the area for residents from all three communities. Access to this site should be preserved as much as possible especially adjacent to the Peters Brook greenway

and any negative impacts from nearby industrial sites in Somerville and Bridgewater should be minimized.

Torpey Athletic Complex, Bridgewater

Zoning along the Raritan/Somerville Borders

North West Raritan Border and North East Somerville Border

West and East of Cornell Blvd

The zoning in Raritan and Somerville west and east of Cornell Blvd is varied. In Raritan on the west side of Cornell Blvd on the south side of Route 28 is a small area zoned B-3 Highway Business District. South of this, the zoning changes to R-4 and R-3 Medium Density Residential. In Somerville, the area on the east side of Cornell Blvd adjacent to Route 28 is zoned PO-R Professional Office Residential. South of this, the zoning changes to R-2 Single Family Residence. Raritan and Somerville should investigate undertaking a joint neighborhood plan for these adjacent residential neighborhoods. Connections across Cornell Blvd for the residents in Raritan are particularly important to since this residential area is isolated from other residential areas by Routes 28 and 206. A neighborhood plan in this area could also investigate ways to minimize the impacts of the adjacent commercial and office uses along Route 28 in both Raritan and Somerville on nearby residences.

South West Raritan Border and South East Somerville Border

West and East of Route 206

The zoning along the remaining portion of the border between Raritan and Somerville is similar. The area on the west side of Route 206 in Raritan south of the Rail Road tracks and north of the Raritan River is zoned B-3 Highway Business and G-1 Governmental Uses District. The zoning in Somerville in this area includes B-5 Highway Business District, B-6 Shopping Center District and I-1 Industrial District. An access management plan for the Route 206 corridor could be prepared to help increase safety in the area and reduce traffic.

In addition, two important redevelopment sites are located in this area – Orlando Drive Corridor in Raritan and the Somerville Landfill site in Somerville. One of the goals of the Orlando Drive Corridor project is to identify opportunities for linkages and improved pedestrian and bicycle connectivity between and among the historic centers of Raritan and Somerville, the redevelopment area at the former Somerville Landfill site, and along Orlando Drive.

Raritan Power Canal Pedestrian Bridge, Raritan

The Somerville Landfill redevelopment project also provides for appropriate connections to and from key sites including the Borough's Main Street business district, the N.J. Transit passenger rail station, and important greenways and open spaces areas such as the Raritan River corridor.

A proposal to extend Davenport through the Landfill site to Orlando Drive has also recently been introduced as a way of enhancing connections in this area. The communities should pursue working together on a joint planning initiative in this area to further explore these and other opportunitites.

OPPORTUNITITES FOR JOINT PLANNING AT THE MUNICIPAL BORDERS

The Regional Center communities of Bridgewater, Raritan and Somerville have a long history of working together successfully on planning initiatives. A number of new opportunitites are identified in this Strategic Plan to undertake joint planning initiatives at key locations within the Regional Center along the municipal borders.

These initiatives focus on strengthening the connections between the communities, fostering new partnerships and/or resolving land use conflicts that exist at the municipal borders. Examples of the types of studies that are recommended include joint neighborhood plans, joint commercial/industrial initiatives, mixed use area studies, redevelopment area plans and studies that focus on the major roadways and the Raritan River that connect and link the communities.

The locations of some of these studies are depicted in Figure 7 Regional Center Zoning and Joint Planning Opportunitites. The initiatives listed below are presented in no particular order and are offered as a suggested list of studies that the communities may want to proceed with some time in the future. This list should be periodically reviewed and new initiatives or studies could be added as land uses in the area change and new redevelopment opportunitites emerge.

Neighborhood Plans

Obert Drive, Raritan

Examine how to enhance linkages to the Obert Drive residential area with nearby neighborhoods in Raritan and the Bradley Gardens neighborhood in Bridgewater.

Vanderveer Road Area, Bridgewater & Raritan

Investigate opportunitites to enhance the connections between the neighborhoods in Bridgewater and Raritan located north and south of Vanderveer Road and sharing of facilities.

Vanderveer Farms Area, Bridgewater

Adamsville Road Area, Somerville & Bridgewater

Examine opportunitites to improve connections and sharing of facilities between the neighborhoods located west and east of Adamsville Road.

Commercial/Industrial Area Initiatives

South Old York Road, Bridgewater & Raritan

Examine opportunitites for joint initiatives between the two sites for things such as landscaping, access and shared parking.

Old York Drive, Raritan

Central Avenue (East of Adamsville Road), Bridgewater

Identify landscaping and buffering opportunitites to protect nearby residential development in Somerville and Bridgewater.

Mixed Use Area Studies

Charlotte Drive Area, Bridgewater & Raritan

Investigate ways to protect this small residential area from surrounding industrial uses in both Bridgewater and Raritan

Edgewater Terrace, Bridgewater & Alpine Way Area, Raritan

Identify ways to link Edgewater Terrace in Bridgewater with nearby residential areas in Raritan at Alpine Way and minimize impacts from nearby industrial and office uses.

Northwood Avenue Area, Bridgewater & Cornell Blvd, Somerville

Examine opportunitites to link this small isolated neighborhood with adjacent neighborhoods in Somerville and lessen impacts from nearby business and office uses.

Vanburen Road, Bridgewater & Somerville

Identify opportunitites to provide buffers between existing manufacturing uses in Bridgewater with adjacent residential and school sites in Somerville.

Somerset Medical Center Area, Somerville & Bridgewater

Identify strategies to lessen the impacts of hospital related uses on established neighborhoods in Somerville and Bridgewater and resolve any existing concerns related to parking and traffic.

Somerset Medical Center, Somerville

Southside Ave Area, Bridgewater & Somerville
Undertake a joint plan to examine how to minimize the impacts from conflicting land uses in Somerville and Bridgewater in and around the area of the Torpey Recreational Center.

Cornell Blvd, Raritan & Somerville
Study opportunitites to lessen the impacts of conflicting land uses in this area in Raritan and Somerville.

Redevelopment Area Studies
Johnson Drive, Raritan
Identify the impacts redevelopment of this area will have on nearby residential neighborhoods in Raritan and the Bradley Gardens neighborhood in Bridgewater.

Johnson Drive, Raritan

Orlando Drive, Raritan & Somerville Landfill, Somerville
Explore opportunitites to enhance connections between these sites and to other important areas, including the extension of Davenport Ave through the Somerville Landfill site to Orlandor Drive.

Kirby Avenue (Baker Taylor Site), Somerville
Identify opportunitites to connect to nearby residential neighborhoods in Somerville and Bridgewater and share facilities.

Baker Taylor Site, Somerville

Connection Studies
Route 202
Corridor study that identifies opportunitites for improving access and safety.

Route 28
Corridor study that investigates ways to enhance linkages between key sites located along Route 28 in Raritan and Bridgewater.

Route 22

Corridor study that proposes common design elements, landscaping, buffering and access management improvements.

Route 22 Ramp

Raritan River Corridor

Greenway study to examine opportunitites to enhance access to the Raritan River from all adjoining neighborhoods and the creation of a continuous trailway that links the communities.

Peters Book Greenway

Other Joint Planning Initiatives

New Jersey Water Supply Authority Concept Plan, Bridgewater & Somerville (Oak Terrace Area)

Under contract with the Department of Environmental Protection, the New Jersey Water Supply Authority is undertaking a study to create an approach for identifying undeveloped and underutilized non-residential sites near critical water resources (such as drinking water) and determine whether such sites are more appropriate for economic development, open space preservation or a combination of both. In doing so, the study seeks to develop a model that protects water resources while improving local economies.

The Somerset Regional Center was chosen to test the methodology and criteria due to its existing land use patterns, highly organized regional partnerships, availability of current GIS data, proximity to a significant freshwater intake (Elizabethtown), and its location between the Raritan North and South Branch confluence and the Raritan-Millstone confluence. The Oak Terrace Concept Plan area, located southeast of the Route 202/206 and Route 22 cloverleaf, is one of two high priority sites for which conceptual site plans will be developed to test the practical application of the methodology and criteria. This site has been identified as key links in the Region's greenway plans. The Oak Terrace site lies within both Bridgewater Township and Somerville Borough, is partially developed, and is adjacent to Peter's Brook and Mac's Brook.

INDICATORS & TARGETS

An important component of any strategic planning process is the identification of indicators and targets that can be used to evaluate the progress in achieving the various goals and objectives recommended in a strategic plan. Below is a proposed list of indicators and targets that the Regional Center Partnership can use to evaluate their progress in achieving important local and regional initiatives identified in the Implementation Plan matrix.

The indicators that are listed are general and can be used by the communities as a guide or marker to gauge whether the Regional Center is moving in the right direction on a particular issue or project. The targets, which are more detailed, reveal whether a specific project has been achieved, a particular issue has been addressed or a problem resolved.

There are two types of targets included in the list. Some of the targets specify that a particular project or initiative be completed within a certain time frame. Three time frames are included - within a 5 year short term time frame, within a 10 year intermediate time frame and within a 10 year or longer long term time frame. It is recommended that the communities update the indicators and targets each year by adding new projects to the list and removing projects that have been successfully completed.

The second type of target is one which proposes that the communities endeavor to make progress every year on a particular issue. No specific recommendations are made with regards to how much progress should be made annually. In order to do this the communities would need to ensure that monitoring of the issue is undertaken throughout the year. The communities may want to consider adding specified targets to measure their progress at some time in the future. For example, a 5% rate could be proposed, which could be increased or decreased in subsequent years depending upon the issue.

It is very important that the Regional Center Partnership re-visit the indicators and targets list on an annual basis. Each community should be asked to determine if they have achieved or not achieved each local target, jointly determine the success the Regional Center Partnership has made in achieving regional targets and comment on the status of every project. In order to aid in this process, the indicators and targets are presented in a worksheet format that includes an annual review section.

INDICATORS AND TARGETS

Downtowns and Main Streets				
Indicators	**Targets**	**Annual Review**		
Housing Availability	Increase housing opportunitites in Downtown Raritan and Downtown Somerville each year. Could include new construction, conversions, adaptive reuse or rehabilitation.	Achieved	Not Achieved	Status
Aesthetics & Amenities	Implement some streetscape improvements in Downtown Raritan and Finderne Commercial Core each year. Could include façade improvements, signage, street trees, awnings, benches, etc.	Achieved	Not Achieved	Status
Pedestrian Friendly	Increase pedestrian access opportunitites in Downtown Raritan, Downtown Somerville and Finderne Commercial Core each year. Could include new sidewalks, repainted crosswalks, traffic calming improvements, etc.	Achieved	Not Achieved	Status
Economic Vitality	Increase business opportunitites and retail sales in Downtown Raritan, Downtown Somerville and Finderne Commercial Core each year.	Achieved	Not Achieved	Status

Redevelopments Area, Economic Development and Community Design				
Indicators	**Targets**	**Annual Review**		
Somerville Landfill	Begin redevelopment of the site within 5 years.	Achieved	Not Achieved	Status
	Complete redevelopment of the site within 10 years.	Achieved	Not Achieved	Status
Downtown Somerville Shopping Center	Complete redevelopment of the site within 5 years.	Achieved	Not Achieved	Status
Somerville Eastern Business District	Adopt redevelopment plan within 5 years.	Achieved	Not Achieved	Status
	Begin redevelopment of the site within 5 years.	Achieved	Not Achieved	Status
Kirby Avenue	Adopt redevelopment plan within 5 years.	Achieved	Not Achieved	Status
	Complete redevelopment of the site within 5 years.	Achieved	Not Achieved	Status
Wyeth Property (American Cyanamid)	Obtain major funding source for redevelopment within 5 years.	Achieved	Not Achieved	Status
	Begin redevelopment of the site within 10 years.	Achieved	Not Achieved	Status
Orlando Drive	Complete corridor study that identifies current conditions and develops a vision for future redevelopment within 5 years.	Achieved	Not Achieved	Status

Johnson Drive Corridor	Begin redevelopment process within 10 years or longer.	Achieved	Not Achieved	Status
New Redevelopment Areas Identification	Identify any new areas that are "in need of redevelopment".	Achieved	Not Achieved	Status
Commercial/Mixed Use Design Standards	Adopt design standards for Downtown Somerville and Downtown Raritan within 10 years.	Achieved	Not Achieved	Status
Residential Design Standards	Develop graphically illustrated design standards in each community's zoning ordinance within 10 years.	Achieved	Not Achieved	Status

Train Station Areas				
Indicators	**Targets**	**Annual Review**		
Transit Village Initiatives	Achieve state funding for Transit Village designation for the Somerville Train Station within 5 years.	Achieved	Not Achieved	Status
	Develop mixed-use village centers around Somerville and Raritan Train Stations within 10 years.	Achieved	Not Achieved	Status
Third Street Redevelopment Area	Conduct redevelopment study for former industrial area adjacent to the Raritan Train Station within 5 years.	Achieved	Not Achieved	Status

Neighborhoods and Housing				
Indicators	**Targets**	**Annual Review**		
Neighborhood Planning	Complete a neighborhood plan in Finderne area within 5 years.	Achieved	Not Achieved	Status
	Complete a neighborhood plan in Somerville medium-density residential area within 5 years.	Achieved	Not Achieved	Status
	Complete at least one joint intermunicipal neighborhood plan within 10 years.	Achieved	Not Achieved	Status
Senior Housing Opportunitites	Undertake a senior housing opportunities study within 5 years.	Achieved	Not Achieved	Status
	Increase senior housing opportunities in the Regional Center each year. Could include new construction, conversions, adaptive reuse or rehabilitation.	Achieved	Not Achieved	Status
Joint Housing Initiatives	Increase number of joint housing initiatives undertaken in the Regional Center each year. Could include shared RCA's, joint studies, etc.	Achieved	Not Achieved	Status

Circulation				
Indicators	**Targets**	**Annual Review**		
Route 28 Corridor	Implement the recommendations of the Needs Assessment Study within 5 years. Includes new sidewalks, bus shelters, modified signal timing, etc.	Achieved	Not Achieved	Status
Somerville Circle	Undertake a traffic study of the circle within 10 years.	Achieved	Not Achieved	Status
Route 202 Corridor	Undertake a build out analysis and access management study of the corridor within 10 years.	Achieved	Not Achieved	Status
Route 22 Suburban Boulevard Plan	Begin to implement the recommendations of the Route 22 Sustainable Corridor Plan within 10 years. Includes consolidating driveways, eliminating at-grade crossings, etc.	Achieved	Not Achieved	Status
Routes 287, 202/206 and 22 Interchange(s)	Identify strategies to reduce congestion and accidents within 10 years.	Achieved	Not Achieved	Status
Chimney Rock Road	Encourage all new projects to accommodate transit and/or BRT technologies	Achieved	Not Achieved	Status
Traffic Calming	Encourage traffic calming improvements in the Regional Center each year. Could include creating a local "tool box", conducting education and outreach, developing pilot plans, etc.	Achieved	Not Achieved	Status
Public Safety	Decrease accidents in the Regional Center each year.	Achieved	Not Achieved	Status
Coordinated Road Improvements	Prepare a 5 Year Road Improvement Plan within 5 years.	Achieved	Not Achieved	Status

Access Management	Implement access management improvements in the Regional Center each year. Could include consolidating commercial driveways, shared parking, eliminating four-lane no shoulder areas, reducing left hand turns, etc	Achieved	Not Achieved	Status
Bicycle Opportunitites	Increase bicycle opportunitites in the Regional Center each year. Could include dedicated bicycle paths, trailways, enhanced road stripping, bike racks, etc.	Achieved	Not Achieved	Status
	Prepare a Bicycle Facilities Master Plan for the Regional Center within 10 years	Achieved	Not Achieved	Status
Pedestrian Opportunitites	Increase pedestrian opportunities in the Regional Center each year. Could include new or repaired sidewalks, crosswalks, or trailways.	Achieved	Not Achieved	Status
	Undertake a Pedestrian Facilities Inventory and Needs Plan for the Regional Center within 10 years.	Achieved	Not Achieved	Status
Greenway/Shared Use Paths	Determine the feasibility and preferred option for a pedestrian and bicycle greenway/shared use path within 10 years.	Achieved	Not Achieved	Status
Freight Movements	Identify appropriate truck routes in the Regional Center within 10 years.	Achieved	Not Achieved	Status
Transit Opportunities	Increase transit ridership in the Regional Center each year.	Achieved	Not Achieved	Status
	Extend the 117 Bus Line to include Raritan at Somerset Street and the Bridgewater Commons Mall within 5 years.	Achieved	Not Achieved	Status
	Extend local NJ Transit service in Downtown Somerville and to the Landfill site within 5 years.	Achieved	Not Achieved	Status

Recreation, Open Space and Natural Systems				
Indicators	**Targets**	**Annual Review**		
Regional Center Shared Recreation Facility	Investigate opportunitites to expand the Torpey Athletic Complex and create a Regional Center Shared Recreation Facility within 10 years.	Achieved	Not Achieved	Status
Raritan River Greenway Expansion & Connections	Acquire some of the necessary land for the Raritan River Greenway within each municipality within 5 years.	Achieved	Not Achieved	Status
	Update the Raritan River Greenway Master Plan to include tributaries of the River within 5 years.	Achieved	Not Achieved	Status
	Begin redevelopment of the Wyeth Site (American Cyanamid) and extend the Raritan Greenway to include minor tributaries within 10 years.	Achieved	Not Achieved	Status
	Provide physical connections from the Somerville Landfill site and signage to lands west of Route 206 including the Duke Estate within 10 years.	Achieved	Not Achieved	Status
	Provide physical connections and signage to East Coast Greenway and D & R Canal State Park within 10 years.	Achieved	Not Achieved	Status
Heritage and Environmental Tourism Promotion	Adopt a heritage and environmental tourism marketing plan within 10 years.	Achieved	Not Achieved	Status
Peters Brook Greenway	Develop a Greenway Plan within 10 years.	Achieved	Not Achieved	Status

Updated Environmental Ordinances	Review local ordinances for current stormwater management and flood control requirements, water quality requirements and best management practices within 5 years.	Achieved	Not Achieved	Status
Preserved Open Space	Increase preserved open space in Regional Center each year	Achieved	Not Achieved	Status
	Institute a1/2 cent open space tax in Somerville and Raritan within 5 years.	Achieved	Not Achieved	Status
	Establish an open space trust fund in Somerville and Raritan within 10 years.	Achieved	Not Achieved	Status
Green Plan	Create a Green Plan for the Regional Center that incorporates all aspects of parks, open spaces and natural systems planning within 10 years.	Achieved	Not Achieved	Status

Shared Services, Community Facilities and Historic and Cultural Resources				
Indicators	**Targets**	**Annual Review**		
Shared Emergency Services	Increase joint emergency service initiatives among the municipalities within 5 years.	Achieved	Not Achieved	Status
Shared Parks & Recreation Services	Increase joint parks & recreation service initiatives among the municipalities within 5 years. Could include consolidated programs, shared equipment, facilities maintenance operations, etc.	Achieved	Not Achieved	Status
	Pursue at least one additional shared service agreement between the communities within 5 years.	Achieved	Not Achieved	Status

Coordination of Library Initiatives	Increase coordination initiatives among the three libraries in the Regional Center every year. Could include coordinating collections and joint programming.	Achieved	Not Achieved	Status
Shared Public Works	Increase joint public works services between Raritan and Somerville within 10 years or longer.	Achieved	Not Achieved	Status
Adequate Infrastructure Capacity Levels	Undertake a study to determine if development of Somerville and Raritan will require additional expenditures on water and sewer infrastructure within 5 years.	Achieved	Not Achieved	Status
Somerset Medical Center Regional Plan	Develop a Regional Plan for the Medical Center that addressed the needs for long term expansion and strategies to minimize impacts on surrounding neighborhoods within 10 years.	Achieved	Not Achieved	Status
Establishment of a Regional Community Center	Complete a Common Needs Assessment Study for a Regional Community Center within 5 years.	Achieved	Not Achieved	Status
Protection of Historic Resources	Examine municipal regulatory language and actions to enhance protection, revitalization and adaptive reuse of historical and architecturally significant sites and districts within 10 years.	Achieved	Not Achieved	Status
Promotion of Cultural & Historic Activities	Increase public awareness and understanding of cultural and historic opportunitites in the Regional Center each year.	Achieved	Not Achieved	Status

UPDATING THE STRATGEIC PLAN

The recommendations and targets suggested by this Strategic Plan are intended to be periodically monitored over time to ensure they are still relevant. The Regional Center Partnership should develop additional recommendations and targets as it matures and the planning process continues to move forward. The following schedule is suggested for periodic review of the targets and other elements of the implementation plan set forth in this document:

1 Year:
Review short-term objectives and targets. How much progress has been made toward reaching them? What changes are needed to make additional progress?

3 Years:
Review intermediate term objectives and targets. Have the indicators changed since the plan was adopted? In what ways is the Region doing better? In what ways is it doing worse? Is good progress being made toward intermediate term objectives? Are processes in place for achieving long term objectives?

5 Years:
Review changes to indicators and intermediate term objectives and targets. How well are the indicators doing at measuring the Region's progress? Should additional indicators be adopted? How many intermediate term objectives have been reached? What changes are needed to further adoption of the Strategic Plan's goals? Should any goals or objectives be added? Have any become less important over time?

10 Years:
Review long-term objectives and targets. What is the Region's progress toward reaching these objectives? Are new goals and objectives on the horizon? Should the Region begin the process of preparing another guiding document to keep moving forward?

RELATIONSHIP TO OTHER PLANNING EFFORTS

State Development and Redevelopment Plan

The Regional Center Strategic Plan was prepared as an initiative intended to implement the policies of the State Development and Redevelopment Plan in Somerset County. The Somerset Regional Center, consisting of the Borough of Raritan, the Borough of Somerville and a portion of Bridgewater, was the first Regional Center to be designated by the State Planning Commission. Since that initial designation in 1996, a new State Development and Redevelopment Plan has been adopted, and the process which led to the preparation of this document launched.

The Regional Center is located inside State Planning Area 1, the Metropolitan Planning Area, which consists of existing developed areas with substantial amounts of existing infrastructure. This designation classifies the Regional Center as a location that is to be made a high priority for redevelopment, as per state policy.

Goals

The State Development and Redevelopment Plan includes eight statewide goals:

- Revitalize the State's Cities and Towns
- Conserve the State's Natural Resources and Systems
- Promote Beneficial Economic Growth, Development and Renewal for All Residents of New Jersey
- Protect the Environment, Prevent and Clean Up Pollution
- Provide Adequate Public Facilities and Services at a Reasonable Cost
- Preserve and Enhance Areas with Historic, Cultural, Scenic, Open Space and Recreational Value
- Ensure Sound and Integrated Planning and Implementing 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 Regional Center Strategic Plan strives to implement the overall goals of the State Plan. It sets forth policies which further the revitalization of downtowns and Main Streets in the Regional Center and identifies a core area in which to focus further growth and development. This Strategic Plan also recommends policies which protect and conserve the Regional Center's environmental resources, as well as preserves and enhances historic, cultural, open space and recreational resources. Further, the Plan also includes recommendations to share public facilities and services and for the communities to work together on sound and integrated planning initiatives.

Policies

The State Development and Redevelopment Plan also includes 19 Policies which provide detailed recommendations on the process and tools to be used to implement the goals. This Regional Center Strategic Plan initiative advances many of these policies in tangible ways.

The Strategic Plan fulfills the goals of Statewide Policy #2, Comprehensive Planning, in being fully integrated with the Master Plan Updates for the three municipalities that make up the Regional Center – the Borough of Raritan, the Borough of Somerville and the Township of Bridgewater. The Plan also creates a single coherent vision for the entire Regional Center.

Additional Statewide Policies which are tangibly advanced by this Regional Center Strategic Plan include:

#3: Public Investment Priorities: This Strategic Plan recommends that public resources be used to upgrade infrastructure to maintain and enhance the values and quality of life of existing developed neighborhoods within a designated Center.

#6: Urban Revitalization: This Strategic Plan promotes a number of policies related to urban revitalization including local economic development, adaptive reuse of commercial and industrial properties, transportation improvements and revitalization for sustainability.

#7: Housing: This Strategic Plan recommends additional housing in downtown Raritan and Somerville within walking distance of employment, shopping and transit facilities.

#8: Transportation: This Strategic Plan recommends transportation investments that improve access to the regional transit system as well as a transit village which will direct new growth to areas near the existing train station.

#11: Water Resources: This Strategic Plan seeks to protect the Raritan River and its tributaries through the designation of greenways along stream corridors.

#12: Open Lands and Natural Systems: This Strategic Plan recommends providing connecting corridors along the Raritan River Greenway throughout the Region which will protect environmentally sensitive areas and provide expanded habitat for a variety of species.

#14: Waster Management, Recycling and Brownfields: This Strategic Plan promotes the cleanup and reuse of a number of existing Brownfield sites located within the Regional Center, including the Wyeth site in Bridgewater and Somerville Landfill site in Somerville.

#19: Design: This Strategic Plan proposes planning initiatives in established neighborhoods in the Regional Center which will identify community design improvements to maintain and enhance the quality of life of these areas. It also proposes community design principles for redevelopment projects that

seek to compliment the existing structural/historic character of the community incorporate provisions for public open space; enhance connections to the existing street grid system and greenways; and encourage strong links to mass transit opportunities.

Communities outside the Regional Center

The Regional Center borders four municipalities – Hillsborough Township, Manville Borough, Franklin Township and BoundBrook Borough.

Hillsborough Township

All of Raritan and Somerville, and a small portion of Bridgewater borders Hillsborough Township on the south. The Raritan River separates all three Regional Center communities from Hillsborough. While this border is relatively lengthy, direct impacts from development on either side of the border are limited because there are only two river crossing in the area – Route 625 or River Road in Raritan and Route 206 in Somerville.

The lands in Hillsborough which borders the Regional Center are zoned Agriculture. A Master Plan Reexamination report dated 1999 recommends that agricultural uses be preserved in this area of the Township. This area of Hillsborough functions as the environs for the Regional Center. The area on both sides of the river is also subject to serious environmental constraints, i.e. floodplains. This Regional Center Strategic Plan recommends the establishment of a greenway along the Raritan River within Raritan, Somerville and Bridgewater, which will provide an additional buffer between the undeveloped areas of Hillsborough Township and the existing land uses in the Regional Center.

Borough of Manville

Bridgewater borders the Borough of Manville in the south east part of the Regional Center. Manville is a historic town which experienced extensive redevelopment since the floods caused by Hurricane Floyd in 1999. The Raritan River and its floodplains separate the Bridgewater portion of the Regional Center from an established residential district and a former industrial area, which has recently been redeveloped. Intermunicipal impacts are limited here by the necessity of preserving a wide floodplain. However, redevelopment both in Manville and in Bridgewater will generate increased traffic on Finderne Avenue, which links the two communities across the Raritan River. Signage and design treatments should be applied to this boundary to inform travelers that they are entering Bridgewater and the Regional Center. It should be noted that Manville has been designated a Town Center by the State Planning Commission.

Franklin Township

The Raritan River separates Bridgewater from Franklin Township on the southeast corner of the Regional Center. This area of the Regional Center in Bridgewater will remain with limited development as it is subject to severe environmental constraints and is separated from the rest of the Regional Center by a rail corridor. The Raritan River Greenway proposed for this area of Bridgewater in this Strategic Plan will

enhance the environmental values of the river throughout the Region.

Borough of Bound Brook

Bound Brook borders the Finderne section of Bridgewater on the most eastern section of the Regional Center. Like Manville, Bound Brook is a historic community which was severely impacted by flooding associated with Hurricane Floyd and has proposed extensive redevelopment since the flooding occurred. The Middle Brook and Route 287 provide a sharp edge separating Bound Brook from the Regional Center. Bound Brook and South Bound Brook have been designated a joint Town Center by the State Planning Commission.

Most of Bound Brook's border with Bridgewater consists of well-established residential developments. Bound Brook's redevelopment Vision Plan proposes a greenway park along the Middle Brook, which coordinates with the Regional Center vision of a Raritan River Greenway along the river and 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 in the Regional Center. At the same time, redevelopment in Finderne and other parts of the Regional Center will continue to impact Bound Brook.

Communities within the Regional Center

The Regional Center Strategic Plan is consistent with the Regional Center Plan Element for Bridgewater, Somerville and Raritan. The goals and recommendations included in this Regional Center Strategic Plan support the more detailed goals and recommendations of each local communities Master Plan element. The Regional Center Strategic Plan provides a coordinated framework for planning for its three constituent municipalities.

The recommendations in this Regional Center Strategic Plan are based on many years of meetings and discussions, beginning with the Somerset County Regional Center Vision Initiative in 1999. As a result of the process leading to it completion, every recommendation in this Strategic Plan is based on a recognition of the connections between policies recommend for Bridgewater, Raritan and Somerville. For example, it proposes a greenway system that traverses the entire Regional Center. It also recommends that redevelopment in downtown Somerville and Raritan be pursued to ensure these areas retain and increase their status as the downtown "central place" for Regional Center. Because this Strategic Plan and each Master Plan Element recognizes the relationship between existing and future conditions in Raritan, Somerville and Bridgewater, there is no need to address separately the relationship between this Regional Center Strategic Plan and the Regional Center Plan Element for Somerville, Raritan and Bridgewater.

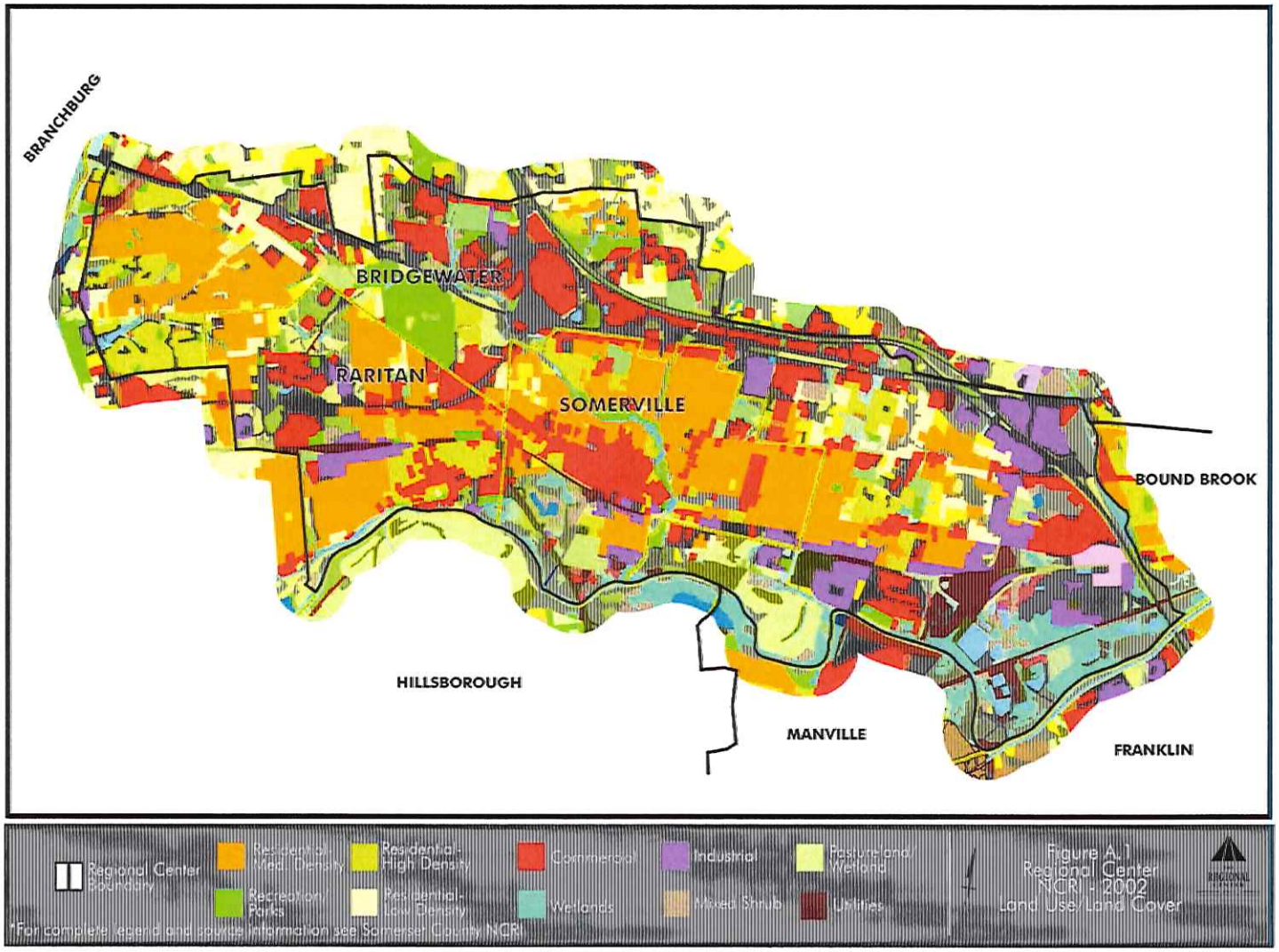
APPENDIX 1 NATURAL AND CULTURAL RESOURCE INVENTORY MAPS

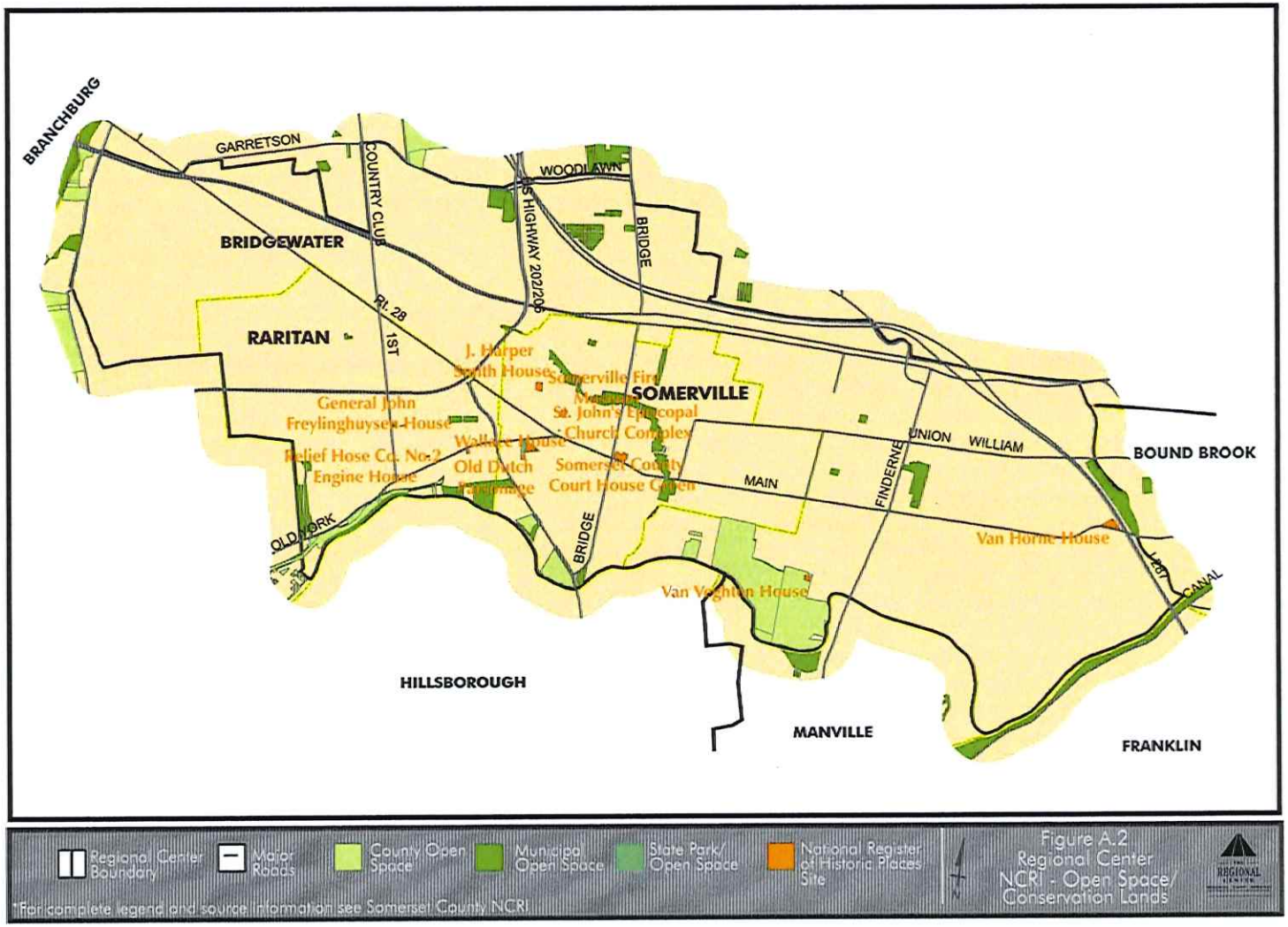
Attached to this Strategic Plan as Appendix 1 are a series of maps produced directly from data obtained from the Somerset County Natural and Cultural Resource Inventory (NCRI). The NCRI was commissioned by the Somerset County Planning Board in 2006 as part of its county-wide strategic plan. The maps utilize publicly available datasets produced by the New Jersey Department of Environmental Protection.

The County NCRI project produced a total of 12 maps. Only those maps that were proved to be relevant to the Regional Center are shown here. For example, as there are neither prime agricultural lands within the Regional Center nor any state/federal threatened or endangered species habitat those maps were not reproduced. For further information on any of the maps not shown here, the reader is directed to the County NCRI.

The following six maps are included as part of the Strategic Plan: Figure A.1 2002 Land Use/Land Cover; Figure A.2 Open Space/Conservation Lands; Figure A.3 Flood Prone Areas; Figure A.4 Soils; Figure A.5 Freshwater Wetlands; and Figure A.6 Groundwater Recharge. The maps that are presented were created by clipping the area of the Regional Center from the larger maps of the entire county. Legend information was simplified due to space and scale constraints. For complete legend and data source information, the reader is again directed to the Somerset County NCRI.

As a largely developed and semi-urban area, what the NCRI data does reveal is that the major natural feature in the Regional Center is the Raritan River and the small tributaries that feed it. It is the presence of the Raritan River that first lead to the settlement of the Regional Center area and greatly influenced both the area's economy and transportation network. The Land Use and Land Cover map (Figure A.1) shows this historical trend as large swaths of industrial land remain near the Raritan River in all three communities. The Open Space/Conservation Lands map (Figure A.2) shows that essentially all large parcels of open space in the Regional Center are preserved as public parkland. The Flood Prone Areas map (Figure A.3) and the Freshwater Wetlands map (Figure A.5) reveal that large areas of land near the Raritan River are within the regulatory floodplain and contain wetlands, thus making them unsuitable for development. The Soils map (Figure A.4) depicts a variety of soil types in the Regional Center. Finally, the Groundwater Recharge map (Figure A.6) shows the location of a large community public wellhead protection area in the vicinity of Torpey Athletic Park in Bridgewater.


BRANCHBURG
BRIDGEWATER
RARITAN
SOMERVILLE
BOUND BROOK
HILLSBOROUGH
MANVILLE
FRANKLIN
Regional Center Boundary
Residential-Med. Density
Residential-High Density
Commercial
Industrial
Pasture/Land/Wetland
Recreation/Parks
Residential-Low Density
Wetlands
Mixed Shrub
Utilities
*For complete legend and source information see Somerset County NCRI
Figure A.1
Regional Center
NCRI - 2002
Land Use/Land Cover


BRANCHBURG
GARRETSON
COUNTRY CLUB
WOODLAWN
US HIGHWAY 202/206
BRIDGE
BRIDGEWATER
RT. 28
1ST
RARITAN
J. Harper Smith House
Somerville Fire Museum
SOMERVILLE
St. John's Episcopal Church Complex
General John Freylinghuysen House
Wallace House
Relief Hose Co. No. 2 Engine House
Old Dutch Parsonage
Somerset County Court House Complex
MAIN
UNION
WILLIAM
BOUND BROOK
FINDERNE
OLD YORK
BRIDGE
Van Horne House
Van Veghten House
RARITAN CANAL
HILLSBOROUGH
MANVILLE
FRANKLIN
Regional Center Boundary
Major Roads
County Open Space
Municipal Open Space
State Park/ Open Space
National Register of Historic Places Site
*For complete legend and source information see Somerset County NCRI
Figure A.2
Regional Center
NCRI - Open Space/
Conservation Lands

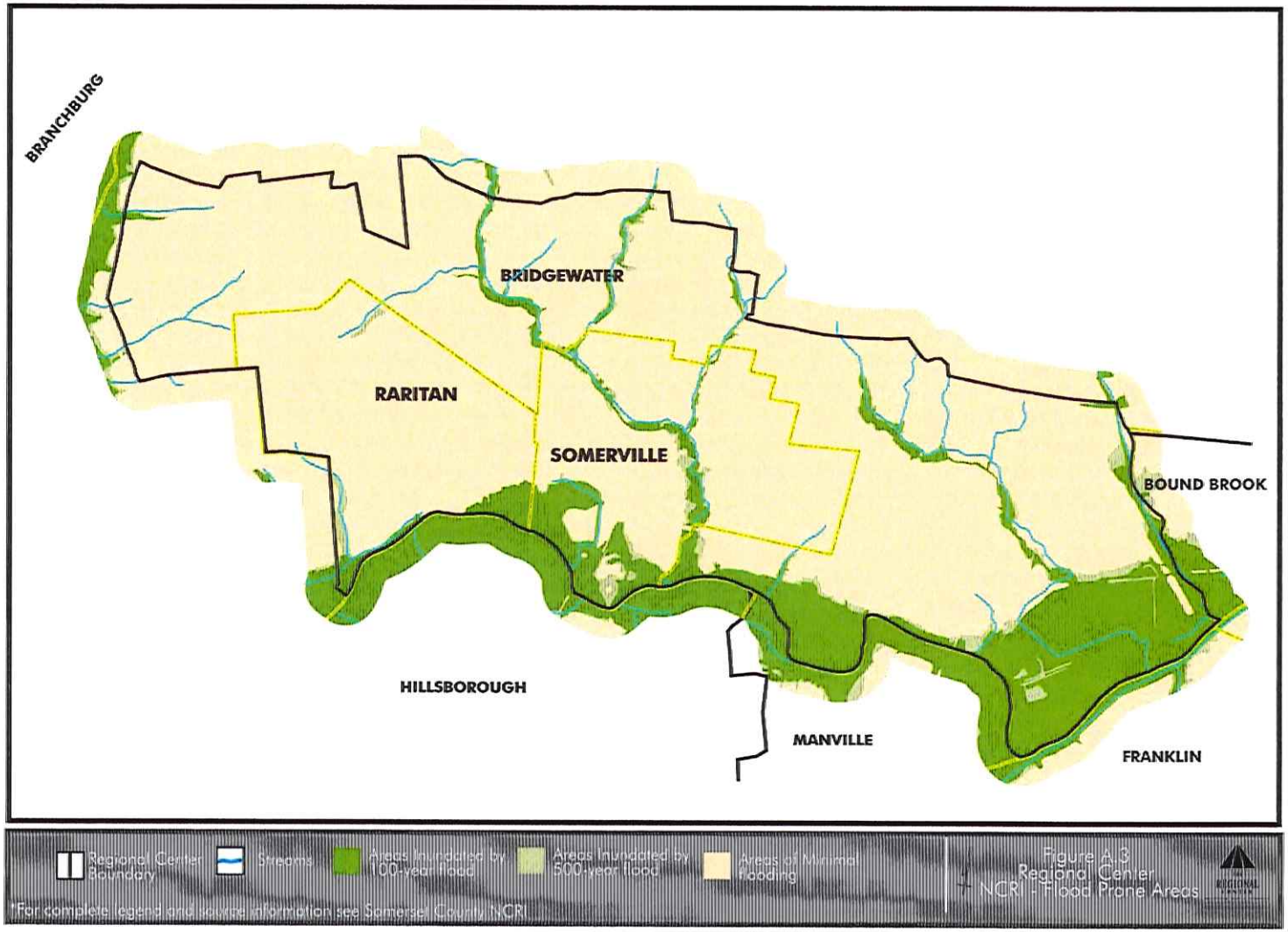
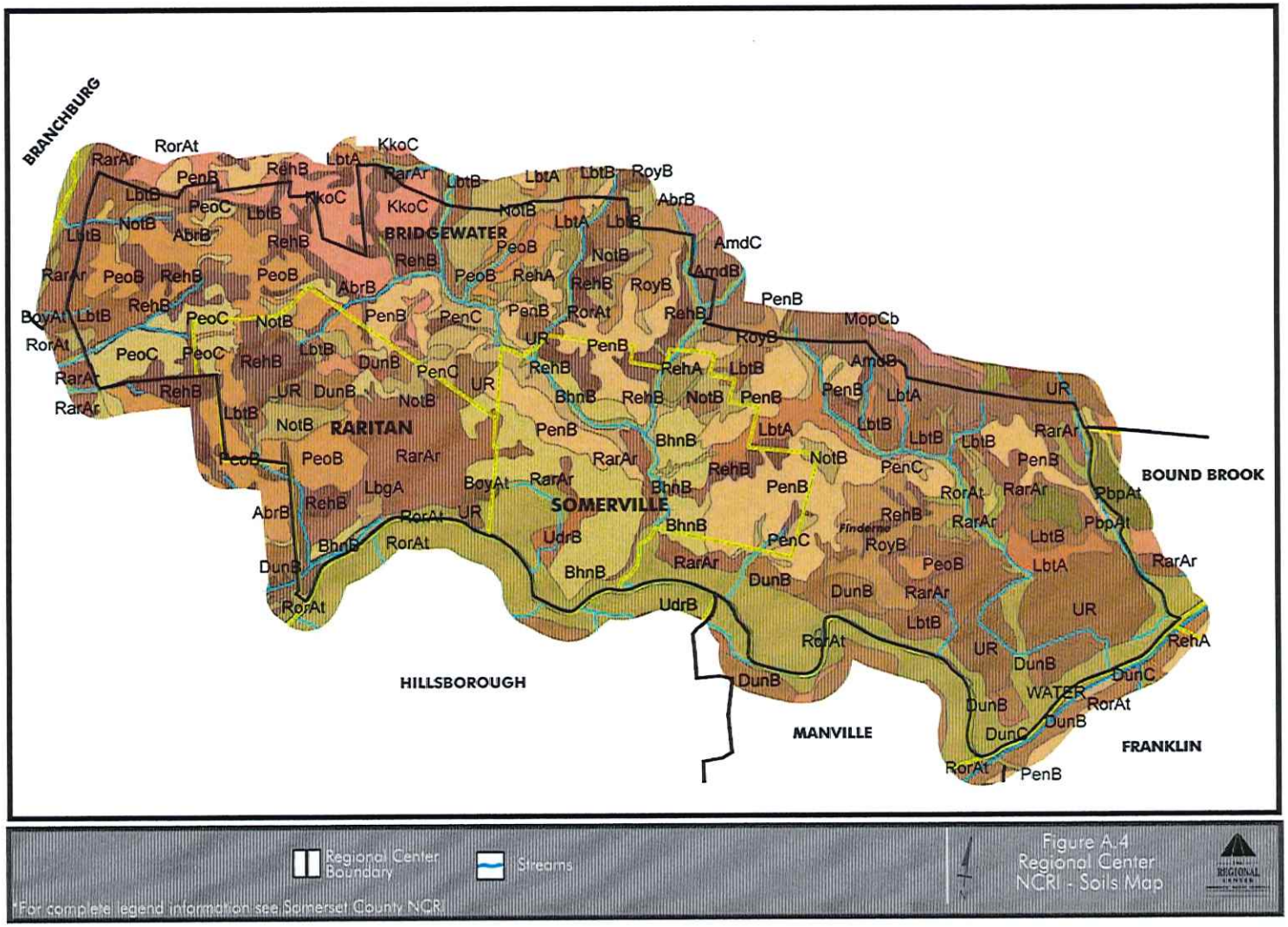
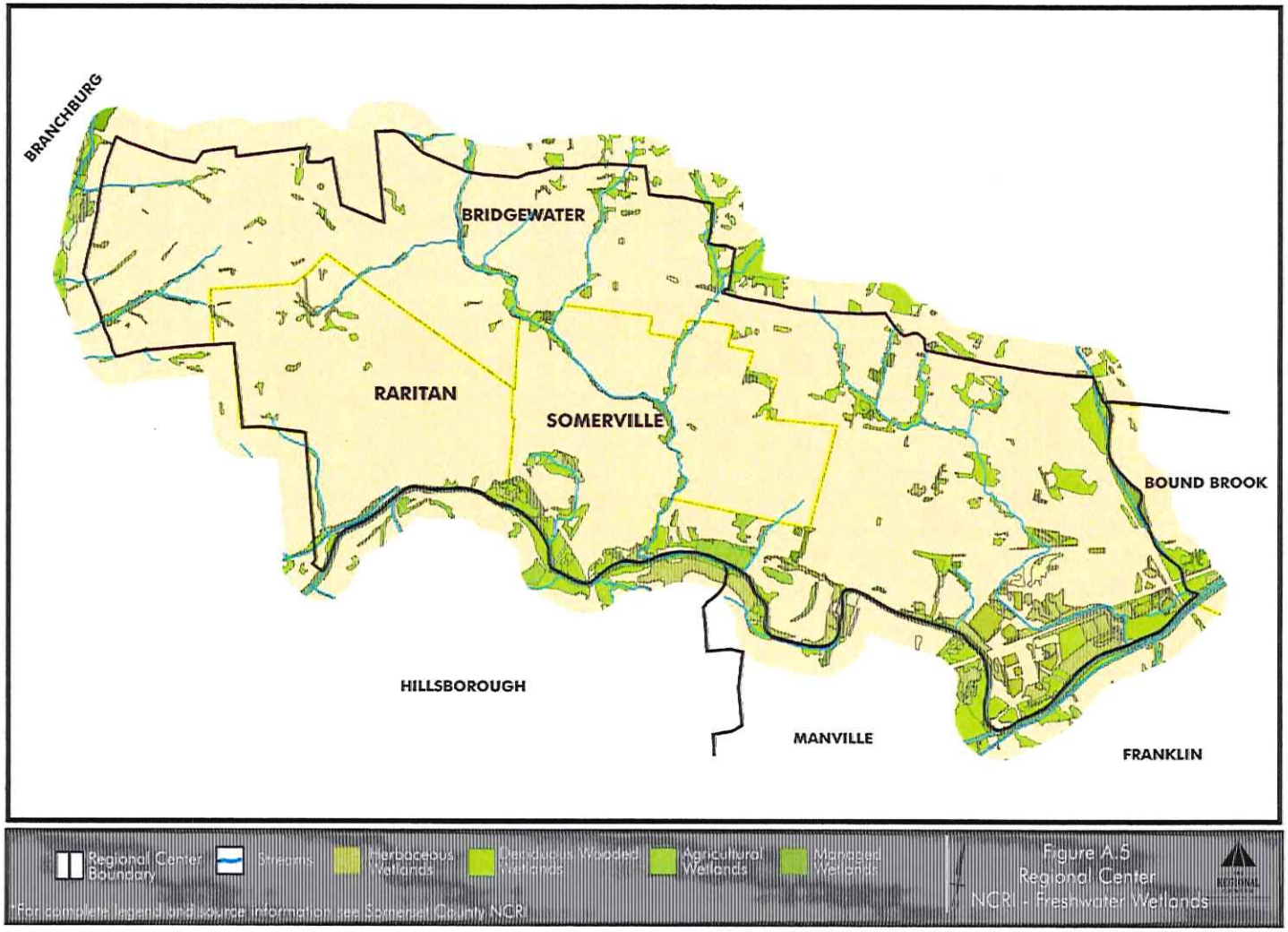
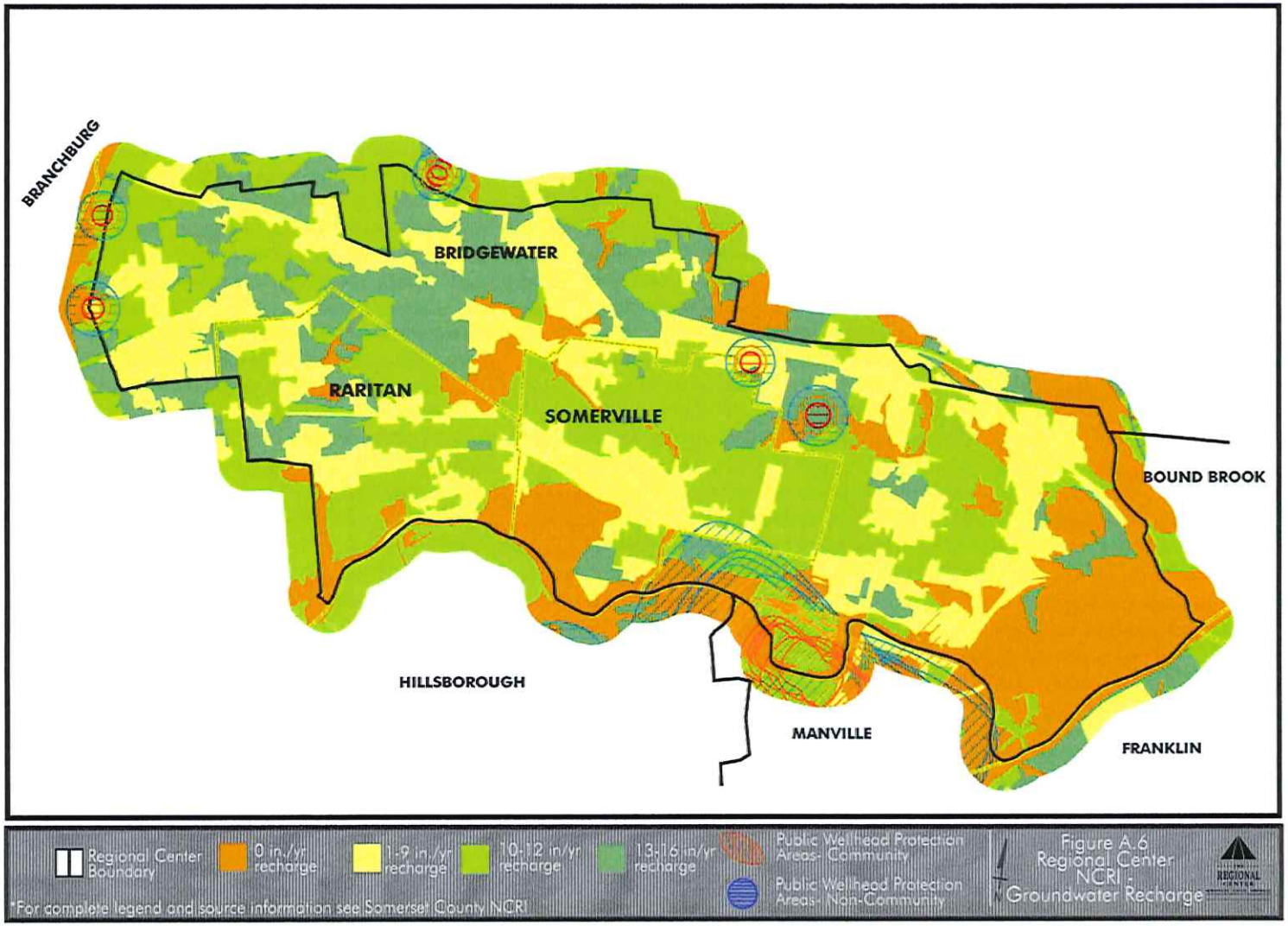


Figure A.3
Regional Center
NCRI - Flood Prone Areas


BRANCHBURG
BRIDGEWATER
RARITAN
SOMERVILLE
HILLSBOROUGH
MANVILLE
BOUND BROOK
FRANKLIN
WATER
Regional Center Boundary
Streams
†For complete legend information see Somerset County NCRI
Figure A-4
Regional Center
NCRI - Soils Map


BRANCHBURG
BRIDGEWATER
RARITAN
SOMERVILLE
BOUND BROOK
HILLSBOROUGH
MANVILLE
FRANKLIN
Regional Center Boundary
Streams
Herbaceous Wetlands
Deciduous Wooded Wetlands
Agricultural Wetlands
Managed Wetlands
*For complete legend and source information see Somerset County NCRI
Figure A.5
Regional Center
NCRI - Freshwater Wetlands

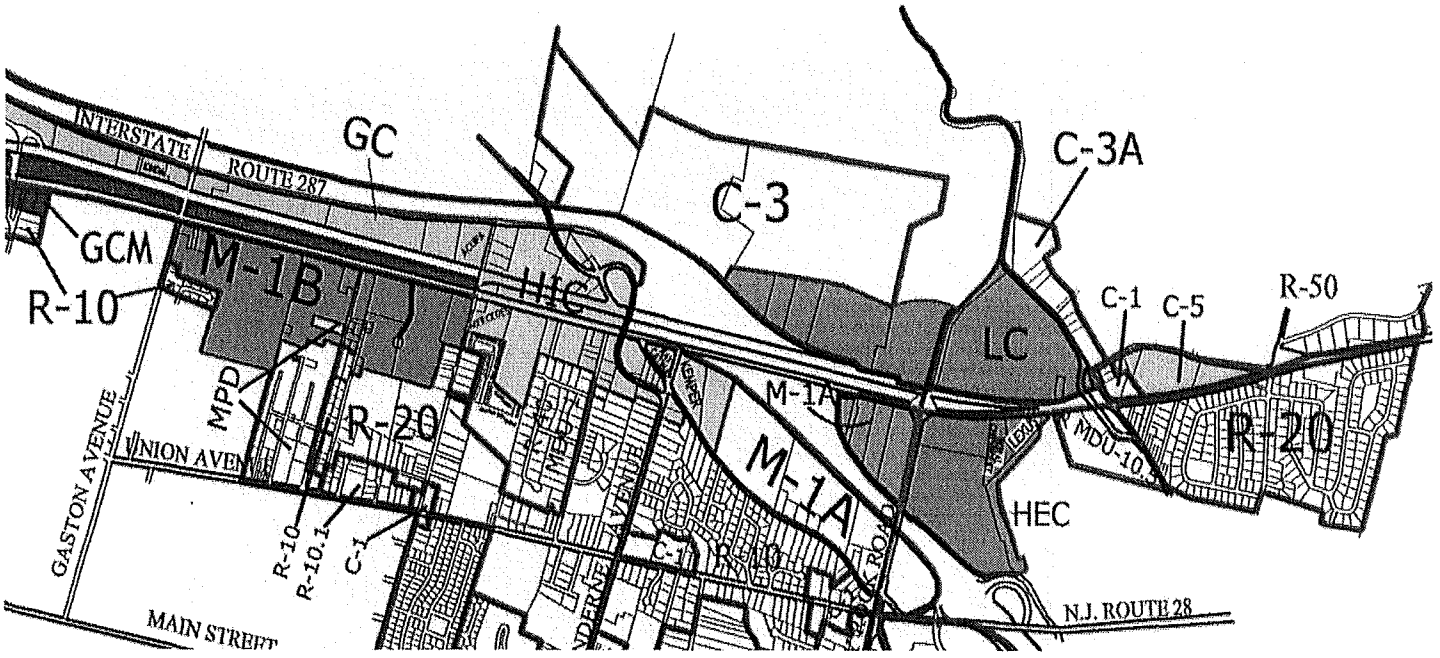

BRANCHBURG
BRIDGEWATER
RARITAN
SOMERVILLE
BOUND BROOK
HILLSBOROUGH
MANVILLE
FRANKLIN
Regional Center Boundary
0 in./yr recharge
1-9 in./yr recharge
10-12 in./yr recharge
13-16 in./yr recharge
Public Wellhead Protection Areas- Community
Public Wellhead Protection Areas- Non-Community
*For complete legend and source information see Somerset County NCRI
Figure A.6
Regional Center
NCRI -
Groundwater Recharge

APPENDICES

VOLUME 7

2009 ECONOMIC DEVELOPMENT PLAN ELEMENT- ROUTE 22 CORRIDOR

Master Plan Amendment for the Land Use Element and Economic Element of the Route 22 Corridor



Bridgewater Township, Somerset County

Prepared by the:
Bridgewater Township Planning Board
Adopted: April 13, 2010

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Bridgewater Township Planning Board

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Master Plan Amendment for the
Land Use Element and
Economic Element of the Route 22 Corridor
Bridgewater Township, Somerset County, New Jersey

ACKNOWLEDGEMENT

The Bridgewater Township Planning Board expresses its appreciation to the members of the Bridgewater Township Economic Development Steering Committee and Bridgewater Township Economic Development Officer, Howard Turbowitz, for the research conducted in the development of their report entitled, *"Economic Development Plan Element-Route 22 Corridor"* dated June 2009. Funding for the report was provided through a Somerset County Municipal Planning Partnership Grant, and the report was presented to the Planning Board in October 2009. The Economic Development Plan Steering Committee members include: Economic Development Advisory Committee members John Schmitt, Chairman, Paul Cernuto, Rose Evans, Charles Harrison, Stephen Koehler, Glenn Petillo, Marc Steinberg, Howard Turbowitz, Economic Development Officer, and Scarlett Doyle, Township Planner. Planning Board members are Mayor Patricia Flannery and Andrew Leven. Advisors are Planning Board members Barbara Kane and Beth Knapp

I. INTRODUCTION

A. Regional Setting

The Township of Bridgewater is well positioned for continued economic success. Its advantageous location at the junction of US Routes 22, 202/206 and Interstate Route 287, and close proximity to Interstate Route 78, connects Bridgewater to a larger region which includes New York City (35 miles), Newark Liberty International Airport (24 miles), Rutgers University (9 miles), Princeton University (17 miles), the Port of Elizabeth (30 miles) to name just a few.

In addition to its superior highway access, Bridgewater also benefits from the presence of passenger and freight railroads. New Jersey Transit's Raritan Valley train line stops at the Bridgewater station which is located adjacent to the TD Bank Ball Park and Bridgewater Promenade just south of Route 22. The Bridgewater railroad station is well-served with 51 trains per day on weekdays, 35 trains per day on Saturdays and 29 trains per day on Sundays. It is generally a 40 to 50 minute ride from Bridgewater to Newark Penn Station, where passengers can transfer to trains to New York, Hoboken and Jersey City. New Jersey Transit operates bus service in Bridgewater as well. The 114 and 117 routes provide service between Bridgewater and the Port Authority Bus Terminal in Manhattan. The 65 Route

provides limited service between Bridgewater Commons Mall and Newark. Bridgewater Commons Mall is also a stop on the 884 Route of NJ Transit's Wheels system. In addition, the Somerset County Office of Transportation runs (SCOOT) buses which serve Bridgewater.

The township is economically diversified with office parks, high-end retail stores, and attractive residential neighborhoods. Major employers, such as MetLife, UPS, sanofi-aventis, and Johnson & Johnson occupy Bridgewater office parks. The Bridgewater Commons and "Lifestyle Center" offer fashionable merchandise and restaurants. In addition to the enhancement of public facilities and infrastructure in recent years, other local initiatives have included development of sports and entertainment facilities such as TD Bank Park. Several major educational institutions are conveniently located near Bridgewater, such as Raritan Valley Community College, Rutgers and Princeton Universities. Bridgewater also benefits from its convenient access to cultural institutions such as the New Jersey Performing Arts Center (NJPAC) and the PNC Bank Arts Center

Bridgewater's proximity to New York City, airports, seaports, and other regional economic drivers will continue to be an engine for economic development in the region.

B. The Route 22 Corridor

This Master Plan Amendment focuses on the Economic Element of the 11 mile Route 22 Corridor. Route 22 crosses Bridgewater Township in an east-west direction and intersects with US Routes 202 and 206, which span a large part of New Jersey in a roughly north-south direction. Route 22 also intersects Interstate Route 287 which, to the south, links to Route 440 in Staten Island and which, to the north, loops halfway around the state before entering Rockland County, New York, and crossing the Tappan Zee Bridge into Westchester County, New York. The north side of Route 22 along the 11 mile corridor is completely within Bridgewater, but the south side of the highway is shared, in part, with Somerville Borough.

Municipal, county and public school budgets are funded to a large extend from the taxes placed on ratables, thereby making ratables from commercial entities such as corporate headquarters, office, retail, and hotel uses, extremely valuable to the township. Preserving the high quality of life enjoyed by Bridgewater residents also requires vigilance to assure that high-value land use anticipates the future needs of the township.

With a limited number of non-residential areas within Bridgewater that are appropriate for commercial development and/or redevelopment, the Route 22 corridor is considered to have the greatest potential for increases in real estate value, and thereby the greatest potential for increases in ratables. Between 1994

and 2004, more than four million square feet of office and industrial space were constructed along the Route 22 corridor[1]. It is currently a patchwork of commercial zones, each with its own use and bulk standards and some of which are no longer appropriate for the commercial demands of today or the foreseeable future.

A goal of this plan is to increase the value of existing commercial properties, provide for commercial diversity, and promote a heightened value of vacant parcels. It is prudent at this time to take stock of existing conditions and take proactive steps to encourage non-industrial development that is appropriate in terms of economic and land use impacts. This plan introduces complementary land uses and replaces outdated and less preferred ones. The strategy of redefining permitted uses will stimulate investment, increase the value of real estate, and increase tax revenues to support the needs and lifestyle of the community. It should be noted that some of the suggested land use and development changes will actually occur over a long period of time. Thus, this plan provides flexibility; as today's conditions evolve, certain uses that are not seen as viable today may be more so in the future. In addition, while this plan is focused on economic development, design guidelines are recommended as they positively impact the value of property and the long-term viability of an area as well as beautifying the corridor.

C. Research and Analysis

These recommendations mark the culmination of several years of research and analysis by both the EDC and the Planning Board, much of which is detailed in the following sections. Current commercial use and demand, tax generating uses, economic impact, input from the township Economic Development Officer, public input and the Planning Board's intimate understanding of the Route 22 corridor were among the many factors evaluated. Local interest groups and property owners provided a sense of community needs. Somerset County based business organizations provided useful insights into the types and amounts of development which may be sustainable in the future. Economic return from taxes for various use groups was evaluated. Developed land was scrutinized relative to potential for further development. A vacant land inventory was prepared as well as evaluation of development regulations for underutilized land. Obligations for affordable housing were discussed. An update presentation for the sustainable Route 22 corridor was presented by Michael Kerwin, CEO of the Somerset County Business Partnership. Continued evaluation of different zones prompted the preparation of a revised Schedule of Area, Yard and Building Requirements Chart for all zones. Numerous public workshops were held in order to gather public input and respond to public concerns. In addition, the Planning Board reviewed, in detail, the existing uses and architecture along the corridor; discussion of design guidelines included a pictorial tour of the corridor as well as vision workshop sessions.

---

[1]Township of Bridgewater Master Plan Amendment and Reexamination Report, Adopted February 28, 2005, page 15.

D. Master Plan Goals and Objectives for the Route 22 Corridor

The goals and objectives of this Master Plan Amendment are to:

- Protect the quality of life enjoyed by Bridgewater residents;
- Enhance and increase tax rateables through diversity of high-value uses;
- Support existing economic anchors and encourage reinvestment into existing facilities;
- Adjust to the contemporary needs of commerce and Bridgewater residents;
- Encourage long term, sustainable site planning;
- Enable more flexibility in development context and promote economic activity in appropriate locations; and
- Offer building design guidelines where appropriate.

II. OVERVIEW

A. Census Data

According to the 2000 Census, Bridgewater had a population of 42,940 people, or about 15 percent of the total population of Somerset County. According to 2007 population estimates, the township had 44,408 people, an increase of 3.4 percent. This represents a 0.49 percent annual population increase, a rate lower than the annual population growth for the County (0.88 percent), but higher than the state overall (0.32 percent). The Census also indicates that median household and per capita incomes were higher than those of Somerset County as a whole, both of which were substantially more than that of New Jersey overall. The population of Bridgewater is well-educated, with half (49%) of the population 25 years or older having a bachelor's degree or higher – a similar percentage to that of Somerset County as a whole (46.5 percent), which is much higher than that of New Jersey overall (29.8 percent). In 2000, the vast majority of workers in the township drove to work alone (85 percent) which is 12 percent higher than the State average (73 percent). Only 3.8 percent of workers worked from home, which is consistent with the County and the State data. While this data has become somewhat dated, it is unlikely that there have been dramatic relative changes over the course of the past few years.

B. Demographics

Comparison of Bridgewater Township, Somerset County and the State

Variable	Township of Bridgewater	Somerset County	New Jersey
Population			
1990 Census	32,509	240,279	7,730,188
2000 Census	42,940	297,490	8,414,350
2007 Estimates	44,408	323,552	8,685,920
Average Annual Growth (1990-2000)	1,043	5,721	68,416
Average Percent. Growth (1990-2000)	3.21%	2.38%	0.89%
Average Annual Growth (2000-2007)	210	2,606	27,157
Average Percent. Growth (2000-2007)	0.49%	0.88%	0.32%
Income (Census 2000)			
Median Household Income	$88,308	$76,933	$55,146
Per Capita Income	$39,555	$37,970	$27,006
% of Families Below Poverty Level	1.6%	2.3%	6.3%
Age (Census 2000)			
Pre-school (0-4 years)	7.7%	7.5%	6.7%
School Age (5-19 years)	19.5%	19.7%	20.4%
Working Age (18-64 years)	60.1%	61.6%	59.6%
Retirement Age (65+ years)	12.7%	11.2%	13.2%
Commutation (Census 2000)			
% Drove Alone to Work	85%	81.7%	73.0%
% Carpooled	6.5%	8.0%	10.6%
% Public Transportation	3.5%	4.1%	9.6%
% Worked at Home	3.8%	3.6%	2.7%
Education			
Bachelor's Degree	27.9%	27.4%	18.8%
Graduate or professional degree	22.0%	19.1%	11.0%
% Bachelor's Degree or Higher	49.9%	46.5%	29.8%

Source: United States Census Bureau, 1990, 2000 and Projections for 2007
Phillips, Preiss, Shapiro, "Economic Development Plan Element – Route 22 Corridor", dated June, 2009

C. Existing Land Uses along Route 22 Corridor [8.5 miles in Bridgewater]

1. Western area of the Route 22 corridor - from the North Branch of the Raritan River to the Somerville Circle.

The western portion of Route 22 is characterized by office campuses with expansive lawns separating buildings, parking areas from the roadway. Nestled between these office complexes is Raritan Valley Country Club, single-family homes and a multi-family town home development.

2. Central area of the Route 22 corridor - from the Somerville Circle to North Bridge Street.

Retail and commercial development is primarily concentrated in the central portion of Bridgewater's Route 22 corridor around the intersection of Routes 202/206. Major uses in this area are Bridgewater Commons Mall, an award-winning "Lifestyle Center", an eight-story Bridgewater Marriott hotel, and a large-scale office complex, including the eight-story Somerset Corporate Center. A large commercial development exists on the south side of this section of Route 22, including establishments such as Friendly's restaurant, Dunkin' Donuts, McDonald's and two gas service stations, all of which are located in the Borough of Somerville.

3. Eastern area of the Route 22 corridor – from North Bridge Street to the Green Brook Township line.

The portion of Route 22 just to the east of the described central area contains a wide landscaped median. Much of this center median is undeveloped, although there are also some commercial uses. There are restaurant uses on both sides of Route 22. Extending eastward from Gaston Avenue towards Finderne Avenue are office uses, auto dealerships, medical, hotel and restaurant uses.

To the east of Finderne Avenue, at the junction of I-287 and Route 22 within the vicinity of Chimney Rock Road, is an industrial area. On the south side of Route 22 to the east of I-287 are Quonset-type buildings which serve various industrial functions, including warehouse, and distribution facilities. On the north side of Route 22 is a quarry. Adjacent to the quarry is the Limited Commercial Zone which includes a vacant 45-acre tract now subdivided, and owned by a private owner and by Somerset County. With frontage on Route 22, Chimney Rock Road, and Thompson Avenue, the two tracts are bisected by the Middle Brook.

East of Thompson Avenue, on the south side of Route 22, are located office and commercial uses including a driving range as well as heavily wooded, vacant land. On the north side of Route 22 are a gasoline service station, a restaurant, a nursing

home and a rehabilitation center, some of which are on steep slopes abutting single-family residential areas further to the north.

D. Somerset County Regional Center

The Somerset County Regional Center consists of the Boroughs of Raritan and Somerville and portions of Bridgewater Township. The Regional Center is located in central Somerset County along the State's major transportation corridors including Route 22, Interstate 287, Route 202 and Route 206. The Regional Center received Regional Center designation from the New Jersey State Planning Commission in 1996. The Bridgewater Core includes the Bridgewater Commons, the adjacent Sixth Avenue Redevelopment Area, the Bridgewater municipal complex, the Somerset Corporate Center and the County facilities.

E. Overview of Market Demand

1. Offices

The office market in Central New Jersey is characterized by relatively high rents, but there is little demand for speculative office space; new construction is limited to buildings with committed occupants.

Reports by Grubb & Ellis indicate that in 2007 and the first half of 2008, there was limited leasing activity for office space. Given the uncertain economic climate, many business sectors have remained reluctant to make new office capital investments and instead were utilizing existing resources.

According to the Somerset County Business Partnership, the overall office vacancy rate in Somerset County in the third quarter of 2008 was just over 17 percent. Bridgewater's vacancy for this period was 6 percent.

2. Retail

The strongest rental rates from a demand perspective have been retail, with lower vacancy rates and higher rents in desirable locations and with solid spending power and limited supply. In Bridgewater, retail vacancies in 2008 were low and average rents were approximately $30 per square foot, which was slightly higher than office rents of $27 per square foot. However, retail rents have been escalating. Asking rents in the Central and Northern Jersey retail markets increased 1.4 percent in 2008 and 2.5 percent in 2007.

The relatively high population densities in the region and the strong demographics make Bridgewater an ideal location for high-end retailers. In Somerset County in 2008, retail spending gained 2.7 percent on top of the 2.7 percent increase in 2007.

The median income of residents in the township and Somerset County is indicative of the high purchasing power in the region[2].

3. Industrial

Consistent with national trends, it is anticipated that the remaining industrial, warehouse, and manufacturing presence will decline due to the high value of real-estate properties on major highways. However, as is pointed out in the Somerset County Regional Center Plan Element of the Bridgewater Master Plan, there are opportunities to capture higher technology and value-added industrial development generated by the bio-medical, health care and pharmaceutical industry clusters in other areas of the township. In addition, there are opportunities to return vacant and/or underutilized industrial properties to productive use through redevelopment initiatives.

4. Residences

The Route 22 corridor is overwhelmingly characterized by non-residential land uses. Although there are some residential uses on the highway, a sizable portion of other Bridgewater's land area is already devoted to residential land uses. The interest for constructing traditional residential housing on the Route 22 corridor is viewed as being very low.

5. Hotels

Bridgewater has five hotels providing 885 hotel rooms. There is also a substantial amount of office space in Bridgewater and surrounding areas. While there are additional hotel rooms in nearby municipalities, the township has major corporations that require hotel rooms for incoming corporate guests. The township's Economic Development Officer presented his findings of a survey of available hotel space and the lodging needs of corporate tenants which suggested that additional rooms are desired.

III. ROUTE 22 – STRATEGY MOVING FORWARD

A. Introduction

An approach toward developing an economically-viable commercial district along Route 22 was presented by the Bridgewater Economic Development Steering Committee, which is comprised of Bridgewater residents with expertise in real estate development and business issues. The policies in this Master Plan Amendment employ several recommendations from the Economic Development

[2] *Marcus & Millichap, Retail Research Market Update: The State of New Jersey Third Quarter 2008.*

Steering Committee, which includes a wide range of uses that serve the public, are particularly appropriate for the highway environment, and reinforce the attributes of the township.

B. Economics

The down-turn of non-residential uses in Bridgewater, including office, retail and industrial, are consistent with that experienced in the rest of New Jersey. Although the demand was strong in the 1990s and first half of this decade, over-stimulated development, and the economy of the nation and state have led to a general slowdown. As noted previously, the viability of various uses will almost certainly evolve in coming years, which is a main reason this plan advocates allowing flexibility in zoning regulations within the Route 22 corridor.

Since industrial space generally commands lower square-foot rents, the Planning Board believes that industrial space is best placed off the major corridor of Route 22. New industrial space should be encouraged to locate in particular building types and in certain locations. Large-scale warehouse facilities can work well in locations with reasonable access to highways. Smaller-scale "flex" space (combination office and warehouse/workshop) can also be viable. As has been seen in Bridgewater and other locations, vacant industrial spaces are being creatively reused until new, innovative and more profitable opportunities become available.

Commercially-zoned properties contribute to the overall benefit of the township. For example, commercial properties in 2010 provided 26.81% of property taxes, without adding to the school population or school expense, thereby reducing the residential tax burden. Appropriate new development can further reduce this tax burden while providing more attractive buildings and pleasing site design. The Economic Development Element of the Master Plan Amendment is designed to enhance the value of commercial zones along Route 22 while restricting uses that could negatively affect the quality of life for Bridgewater residents.

Hotels have positive tax implications; Bridgewater is able to collect an additional 3% Municipal Occupancy Tax on the rent charged for the occupancy of a room in a hotel, motel, or similar facility.

Given COAH regulations, new non-residential construction may or may not result in an obligation for affordable housing. This issue is in flux and uncertain due to the ever-changing legislative approach toward this issue.

C. Diversification

Changes recommended in this element may also result in creation of new employment that can help diversify the economy, as well as offer local residents

more job and service options. Development enhancements to underutilized properties will benefit residents by increasing the township's tax base. Bridgewater recognizes that development beyond its borders also affect the needs of business. Bridgewater will address changes in the future in order to keep abreast of the changing needs of commerce. Diversifying its commercial portfolio and strengthening its economy will help Bridgewater protect against dramatic future changes.

IV. LAND USE ELEMENT AMENDMENT

A. Introduction

Bridgewater retains the high quality of its existing commercial stock and recognizes that adjustments in zoning can be accomplished without compromising excellence in development. Zoning throughout the Route 22 corridor has been examined by the Planning Board. The variety of permitted uses has been coordinated with appropriate locations. In constructing the recommendations in this plan, decisions that were made were based on economic realities as well as the desire to maintain the quality of life that Bridgewater residents embrace. Critical zone changes along this corridor are introduced for discussion below in response to studies and workshops conducted by the Planning Board. The Planning Board has made recommendations for changes in some zones, has created entirely new zones, and recommended no adjustments for others. See Appendix A for a full listing of current zones, permitted uses and standards in the respective zones studied along Route 22.

B. Existing C-3 Office and Service Zone

The C-3 zone is intended for intermediate-scale office and commercial office uses on larger parcels with direct highway access. The zone is concentrated in the Route 22 corridor within the Regional Center and Route 22 at the municipal border with the Borough of Green Brook on the east and westerly towards the municipal border with the Township of Branchburg. It permits a broad range of offices for business, professional and service uses as well as research activities, medical services, banks and financial institutions and assisted living facilities. 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, maximum lot coverage of 60 percent, maximum floor area ratio (FAR) of 0.30 and maximum building height of 3 stories/45 feet.

C. Existing GCM General Commercial and Manufacturing Zone

The GCM zone is centrally located in Bridgewater's portion of the Route 22 corridor on the north side of Route 22, Routes 202/206, the median, and a small portion of

the south side of route 22 in the vicinity of North Bridge and Grove Streets. This zone currently permits as principal uses the office and service uses permitted in the C-3 Zone, as well as manufacturing, laboratory, printing and publishing uses, research uses, essential services and agricultural and horticultural uses. Certain retail and service uses are permitted as conditional uses: new car, truck, farm machinery, construction equipment and recreation vehicle sales; service stations; animal hospitals and animal kennels; accessory retail services within professional business and research offices and child-care centers as part of professional business and research offices.

D. Existing M-1, M-1A Limited Manufacturing Zone and M-1B Limited Manufacturing Zone – Small lot

The Limited Manufacturing Zones correspond to the M-1, M-1A and M-1B zones and are located on Route 22 and Route 202. The zones are intended for light manufacturing, distribution and office development in areas with access to major highway corridors. The zones permit manufacturing, research laboratories, warehouses, truck terminals, storage yards and business offices as well as some limited commercial uses.

E. Existing C-5 Commercial/Nursing Home Zone

The C-5 zone is intended to provide the opportunity for limited development of senior citizen housing and offices in a highway location. The Zone 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 minimum lot size of 3 acres, maximum FAR of 0.25, and maximum lot coverage of 40 percent and maximum building height of 2 stories/35 feet.

F. Existing HIC Highway Interchange Commercial Zone

The purpose of the Highway Interchange Commercial Zone 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 Zone 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 zone contains auto dealerships, hotels, offices and restaurants. The bulk standards of the HIC zone promote large-scale, planned development with minimum lot area of 5 acres,

maximum FAR of 0.35, and maximum lot coverage of 60 percent and maximum building height of 3 stories/45 feet. Hotels may be 4 stories/45 feet. There is also a requirement for a minimum building setback of 200 feet and conservation easements of 50 to 125 feet.

G. Existing LC Limited Commercial Zone

The LC zone is located outside the boundaries of the Regional Center and is on the north side of Route 22 at Chimney Rock Road and Frontier Road. It permits a mixed-use approach and permits commercial uses such as theaters, restaurants, hotels, commercial recreation facilities, retail, services, professional offices, and public uses such as community centers, parks and open space. The area has steep slopes and portions of it abut heavy industrial uses such as the quarry operation.

H. Existing HC Hotel Conference Center Zone

The HC zone permits hotels, conference centers, restaurants, banquet halls and offices at a moderate intensity of development. There is only one parcel in the township with this zone designation. The lot is currently the Bridgewater Manor, which is a banquet and catering hall. Bulk standards include minimum lot area of 6 acres, maximum FAR range of 0.20 to 0.40, depending upon use, and maximum lot coverage of 60 percent and maximum building height of 5 stories/60 feet.

V. RECOMMENDED ZONING CHANGES

Certain zone regulations and zone boundaries have been recommended for amendment to further the goals and objectives of the Master Plan.

A. C-3 Office and Service Zone

It is suggested that the C-3 Zone regulations be amended to permit additional uses to improve business offerings in the Route 22 corridor. Allowing new, complementary uses would broaden opportunities for property owners and promote diversification of uses in the corridor and, by extension, the township's tax base. Many of these uses can be located within office buildings or in freestanding buildings similar in appearance to office buildings.

1. Recommended standards and uses in the C-3 zone

   A. Principal Permitted Uses.
   (1) Business, professional and service offices and establishments, such as banking and bank-related functions; credit services; security and commodity brokers; insurance carriers; real estate services; advertising services,

employment agencies; consumer and mercantile credit and collection services; consulting services; data processing; engineering and architectural services; accounting services.

(2) Health clubs, wellness centers, day spas and gyms.

(3) Essential services.

(4) Nursing homes and assisted living facilities.

(5) Indoor commercial recreation with the exception that inflated structures are not permitted.

(6) Adult medical day-care.

(7) Medical offices and dental offices.

(8) Medical-support centers of limited service for uses such as diagnostic MRI facilities, out-patient rehabilitation centers, and out-patient surgical centers.

(9) Research laboratories and research activities.

B. Permitted Accessory Uses.

(1) Uses customarily incidental to a principal permitted use.

(2) Parking.

(3) Signs.

C. Conditional Uses.

(1) Accessory and incidental retail services, only when located within a professional or business office. The retail use must be clearly subordinate to the permitted use and may not occupy more than 10% of the floor area of the principal use.

D. Bulk Standards

(1) Maximum Height: 3 stories/45 feet; and that the first story shall not exceed a height of 25 feet measured from the floor-to-ceiling. This restriction

is introduced in order to eliminate the unnecessary appearance of mass where a one-story building could be constructed 45 feet in height.

(2) Other bulk standards for this zone are not recommended to be changed.

2. Recommended deletions in the C-3 zone

A. It is recommended that the following use be deleted from the list of permitted uses in the C-3 Zone:

(1) Delete, "Any form of agriculture or horticulture, including the storage or sale of farm products where produced." This use is inconsistent with the appropriate development of the corridor from an economic development perspective.

3. Recommended amendment to the C-3 zone area:

A. It was requested by the owner of the Varitronics office building on Route 22, Block 371, Lot 29, that this lot be included in the C-3 zone. The reason for this request was due to the nature of the sole access, which is onto Route 22. The lot has been used as an office, in compliance with the C-3 zoning zone, since 1987. The lot is undersized, being 21,190 s.f. in size, compared to the 5 acre minimum required for the C-3 zone. By its reduced size, the lot departs from many of the C-3 standards; however, the office use is in keeping with permitted C-3 uses and is not viewed as a lot which could be integrated into a residential neighborhood.

(1) The Board concurs with the request that Block 371 Lot 29 be placed in the C-3 zone.

B. GCM General Commercial and Manufacturing Zone

1. It is recommended that the following use be deleted from the list of permitted uses in the GCM Zone: "Any form of agriculture or horticulture, including the storage or sale of farm products where produced." This use is inconsistent with the appropriate development of the corridor from an economic development perspective.

C. GCM General Commercial and Manufacturing Zone to New General Commercial (GC) Zone on Route 22

The zone permits a range of uses; however, this area is not a viable location for most new manufacturing uses and there is currently ample office space in this area according to studies conducted by the Economic Development Officer.

Consideration has been given to modifying the mix of permitted uses in the GCM Zone along the band of land between Route 22 and Interstate 287. It is recommended that this be designated as a new zone, GC General Commercial. Excluded from this recommendation is the median strip between the eastbound and westbound lanes of Route 22 and the portion on the south side of Route 22 in the vicinity of North Bridge and Grove Streets, and along Route 202/206 which would remain as GCM. A new GC zone on Route 22 would permit a variety of uses.

1. Purpose of the GC zone

A purpose of the GC zone is to provide uses that serve township residents, nearby workers and passing motorists in a manner that provides desired employment and services, yet minimizes visual impacts. Guiding principles for this zone include the following:

- High-quality development that does not have the appearance of strip commercial.
- Scale of the uses should be consistent with the bulk requirements of the zone and with the acknowledgement that the land is flanked by interstate and state highway systems.
- Limited number of vehicular access points on the state highway.
- Required interconnections between individual properties.
- Uses such as new and used car dealerships, automobile repair services, service stations, convenience stores, and similar uses that promote high traffic volumes are specifically not permitted in the new zone.

2. Tax lots in GC zone

The area on the north side of Route 22 between Adamsville road and North Bridge Street includes the following blocks and lots for the GC zone:

Block	Lot	Block	Lot
556	1	559	1
556	2	559	3
556	3	559	5
558	1	559	6
558	2	559	7

3. Zone standards for the GC zone

Multiple buildings are permitted on a single site, but only as part of a unified development with common design.

A. Principal Permitted Uses

(1) Business, professional and service offices, such as banks, bank-related functions; credit services, security and commodity brokers and dealers; insurance carriers and agents; real estate services; advertising services; employment agencies; storefront mailing services, medical offices and dental offices; engineering, accounting, law, and architectural services.

(2) Essential Services.

(3) Gyms, health clubs and day spas.

(4) Indoor commercial recreation.

(5) Retail services such as stores for: books, cards and stationary, health food, furniture, home furnishings, electronics, art galleries, sporting goods; clothing, except that convenience stores, which result in high traffic volumes are not permitted.

(6) Restaurants, excluding drive-in and drive-through fast food establishments.

(7) Medical-support centers of limited service for uses such as diagnostic MRI facilities, out-patient rehabilitation centers, and out-patient surgical centers.

B. Permitted Accessory Uses

(1) Other uses and structures customarily incidental to the Principal Permitted Use.

(2) Parking

(3) Signs

C. Conditional Uses

(1) All existing or approved new car, truck, construction equipment, recreational vehicle, and farm machinery sales uses shall have the right to continue, the right to be enlarged on the existing lot, and the right to be rebuilt if totally destroyed.

D. Bulk Requirements for the GC zone-Recommended Amendment
The GCM zone bulk requirements should be maintained for the GC zone, except that it is recommended that non-residential uses be encouraged in a two-story, mixed-use commercial and/or office structure arrangement.

(1) To offer this encouragement, it is recommended that the FAR for a minimum two-story, retail-office mixed-use structure be increased to 0.35 where at least 50% of the floor area of the first floor is provided on upper floors.

D. M-1A Manufacturing Zone

According to the 2005 Master Plan Amendment, portions of the M1-A zone lack a coordinated and coherent land use pattern and are highly transitional in nature as older heavy industrial uses are replaced by new, light-industrial and commercial uses. The Township Zoning Board of Adjustment has granted a number of use variances in recent years for uses such as indoor commercial recreation that are in demand and well-suited to adaptive reuse of existing industrial structures. Consideration should be given to the expansion of permitted uses consistent with the trend of replacing older heavy industrial uses with new light industrial uses and commercial uses. A capital improvement project to upgrade the Route 22 and Chimney Rock Road interchange and improve access, capacity and safety in the interchange area is ongoing and considered to be an asset for the development of the M-1A zone and prompts an aggressive approach to capture the benefits of this new interchange.

In this plan, the M-1A zone on the easterly side of Chimney Rock Road is distinguished from the M-1A zone on the westerly side of Chimney Rock Road. The M-1A zone, located to the east of Chimney Rock Road, is recommended to be re-designated as the HEC, Highway Enterprise Center zone. This new direction is in response to recommendations made in the 2005 Master Plan Amendment which considered this area to be underutilized and in need of a cohesive vision. The need for more structure in zoning is borne out by the fact that these properties have routinely sought use variance approvals in order to keep the industrial park viable.

This zone sits at a key spot within the Route 22 corridor and Bridgewater as a whole. The proposed Chimney Rock Road interchange improvements represent a tremendous opportunity as it will greatly enhance accessibility of certain properties in this area. Connections from Route 287 also will be improved, which will make these properties more valuable for certain high-value uses. This section of the corridor also is separated from most residential areas in the township and new development would have limited visual impacts on existing residences. The 5-story height for hotels is justified by the unique physical location and configuration of lots. Proximity to the Bridgewater railroad station on the New Jersey Transit

Raritan Valley Line and the TD Bank Ballpark minor league baseball stadium are additional assets. The importance of this area was recognized in the February 28, 2005 Master Plan Amendment and Reexamination report, which noted that "a number of efforts have focused on the future revitalization of this area as the East Gateway into the township."

In light of these factors, it is recommended that portions of M-1A Zone adjacent to Route 22 be rezoned. Based on a presentation of available hotel space and needs of corporate tenants by the Economic Development Officer, the Board concludes that there is need for additional quality hotel rooms. It would be more appropriate to provide opportunities for development that capitalizes on this area's location and its accessibility to the highway network and the Bridgewater railroad station. High-value, high-quality development is possible given these advantages.

The westerly side of Chimney Rock Road, a Somerset County roadway, should substantially retain the M-1A zoning characteristics. The existing uses in this area are recognized, and their continuation of use is supported by virtue of retaining the M-1A zoning. The zoning addition is that an M-1A Economic Development Option is also introduced which is intended to encourage consolidation of lots toward a more productive product. Minor use adjustments have been made to the existing zoning standards of the M-1A zone, based on workshop hearings. These will not hamper the existing uses on the lots in question. It was noted that car dealerships are not encouraged in this zone, and medical uses are more appropriately sited elsewhere in the Route 22 corridor. For the purpose of clarity, the global references for the M-1A zone is to also permit uses in the GCM and C-3 zones, The listing of permitted and conditional uses below removes new car dealerships from the otherwise permitted conditional uses found in the GCM zone. Medical offices and dental offices otherwise permitted from the C-3 zone are also eliminated. An Economic Development Option has also been introduced for the area to the west of Chimney Rock Road.

1. <u>M-1A Manufacturing Zone-recommended amendment</u>
   A. Principal permitted uses.
      (1) Business, professional and service offices and establishments, such as engineering and architectural services; accounting and bookkeeping services; banking and bank-related functions; credit services; security and commodity brokers and dealers; insurance carriers and agents; real estate services; photographic services; advertising services; employment agencies; consumer and mercantile credit and collection services; printing, publishing, duplicating, mailing and stenographic services; consulting services; data processing.

      (2) Manufacturing.

      (3) Research laboratories and Research activities.

(4) Essential services.

(5) Trucking terminals.

(6) Warehouses.

(7) Multimedia production such as graphic design and web-based services.

(8) Nursing homes and assisted living facilities.

(9) Adult medical day care.

(10) Indoor commercial recreation.

(11) M-1A Economic Development Option (See below).

B. Permitted accessory uses.
(1) Other uses and structures customarily incidental to a principal permitted use.

(2) Public and private parking.

(3) Signs (see § 126-162 and 126-195).

(4) Limited retail that is accessory to the permitted use, internal to the permitted use, and primarily intended to service the needs of the employees.

C. Conditional uses.
(1) Accessory retail services within professional business and research offices.

(2) Child-care centers as part of professional business and research offices.

(3) Animal hospitals and animal kennels.

D. Parking requirements. Parking shall conform to the standards set forth in § 126-169.

2. M-1A Economic Development Option for the westerly side of Chimney Rock Road-recommended amendment

The M-1A Economic Development Option is permitted for the section of the M-1A zone which is to the west of Chimney Rock Road and includes consolidation of the following lots:

Block 234	Lot 2	(.79 acres per tax records)
Block 234	Lot 3	(3.67 acres per tax records)
Block 234	Lot 4	(4.95 acres per tax records)
Block 234	Lot 5	(7.79 acres per tax records)

A. Zone Standards

The M-1A Economic Development Option is recommended only if the following minimum standards are met:

(1) Consolidation of all lots noted above in this section of the M-1A zone is required. It is understood that Block 234, Lot 1, which is owned by Somerset County, will be used for interstate ramp improvement purposes and therefore is not available for development.

(2) The plan for development must include a hotel of no less than 150 rooms.

(3) The plan may be phased, but the design must be a fully-integrated design, with the hotel being the first building constructed in the phased plan.

B. Principal Permitted Uses

(1) Professional or Business offices such as banking, bank-related functions; credit services, security and commodity brokers and dealers; insurance carriers and agents; real estate services; advertising services; employment agencies; storefront mailing services; engineering, accounting law, and architectural services.

(2) Hotels.

(3) Conference Centers.

(4) Medical-support centers of limited service for uses such as diagnostic MRI facilities, out-patient rehabilitation centers, and out-patient surgical centers.

(5) Gyms, health clubs, day spas, wellness centers.

(6) Essential Services.

(7) Restaurants, excluding drive-in and drive-through fast food establishments.

C. Permitted Accessory Uses

(1) Other uses and structures customarily incidental to the Principal Permitted Use.

(2) Parking.

(3) Signs.

(4) Accessory retail services, only when located within a professional or business office or hotel. The retail use must be clearly subordinate to the permitted use and may not occupy more than 10% of the floor area on which the accessory retail use is to be located.

(5) Meeting rooms within an office, or hotel.

D. Bulk Standards

The bulk standards for the development option will be the same as the underlying M-1A zone with the following exceptions:

(1) Hotels: Maximum building height shall be 5 stories and 60 feet. and the maximum floor area ratio is 0.40.

(2) All other uses shall have a maximum building height of 3 stories and 45 feet and the maximum floor area ratio is 0.35.

E. Portion of M-1A Zone and HC Zone Change to HEC Highway Enterprise Center Zone

On the east side of Chimney Rock Road between Routes 22 and 287, it is recommended that this area be rezoned from M-1A to the HEC Highway Enterprise Center zone. While it is recognized that there is a grandfathering protection for this area, the long-range vision is to promote more higher-value uses.

The current Highway Commercial (HC) zone contains only one parcel, the Bridgewater Manor conference and catering facility, which is located on the west side of Route 202-206 at the municipal border with Bedminster Township. The rationale for including a lot outside the study area for this zone is due to the identical uses appropriate for each and the desire to rename the zone from its

current designation as Hotel Conference Center, to a zone name which would infer that the zone is not limited to the hotel and conference centers.

The purpose of the Highway Enterprise Center (HEC) zone is to accommodate business, restaurant, hotel, conference center, and catering hall uses necessary to sustain and support the business environment and also to serve the needs of the residents of the township.

The following properties are proposed for the HEC Highway Enterprise Center.

Block	Lot
356	1
356	2
356	2.02
356	3
356	4
485	2 (Bridgewater Manor, aka 1251 Associates)

A. Zone Standards

Principal Permitted Uses.

(1) Business, professional and service offices and establishments, such as banking and bank-related functions; credit services; security and commodity brokers; insurance carriers; real estate services; advertising services, employment agencies; consumer and mercantile credit and collection services; consulting services; data processing; engineering and architectural services; accounting services.

(2) Health clubs, day spas and gyms.

(3) Adult medical day-care.

(4) Medical-support centers of limited service for uses such as diagnostic MRI facilities, out-patient rehabilitation centers, and out-patient surgical centers.

(5) Indoor commercial recreation with the exception of inflated 'dome' structures which are not permitted.

(6) Hotels and extended stay lodges.

(7) Conference centers.

(8) Banquet halls.

(9) Research laboratories and Research activities.

B. Permitted Accessory Uses.

(1) Uses customarily incidental to the principal permitted uses, such as auditoriums, swimming pools, tennis courts, health clubs and retail and personal service establishments. All accessory uses are to be located within the same building(s) as the principal use(s), except that tennis courts and swimming pools which may be located outdoors.

(2) Accessory retail services, only when located within a professional or business office, or hotel. The retail use must be clearly subordinate to the permitted use and may not occupy more than 10% of the floor area of the floor on which the accessory retail use is to be located.

(3) Parking Garages.

(4) Signs.

C. Conditional Uses

(1) Restaurants, excluding drive-in and drive-through fast food establishments and only when an existing hotel or extended stay lodge is located in the zone.

(2) All existing or approved new car, truck, construction equipment, recreational vehicle, and farm machinery sales uses shall have the right to continue, the right to be enlarged on the existing lot, and the right to be rebuilt if totally destroyed.

D. Supplemental Regulations

(1) Design criteria. Development in this zone shall be designed in an integrated, cohesive fashion that will provide pedestrian and vehicular links among the various principal permitted uses selected for development.

E. Bulk Standards.

Bulk standards are not recommended to be changed, except for the following:

(1) Maximum FAR: 0.40 for Hotels and 0.35 for all other uses.

(2) Maximum Height: 5 stories/60 feet for Hotels; 3 stories/45 feet for all other uses.

(3) In a single-story building the floor to ceiling height shall not be greater than 25-feet.

(4) Parapets and similar projections above the roofline shall not exceed three feet above the roofline.

F. M-1B Limited Manufacturing Zone – Small lot

It is recommended that there be a relaxation of regulations currently controlling business offices in this zone. The following should be modified in the Ordinance.

1. Delete 126-317 A. (1)(a) which limits the lot area for a freestanding business structure to be on no more than 4 acres.

2. Delete 126-317 A. (1) (b) which controls the maximum office floor area for business office to 50,000 square feet.

3. Add medical offices and dental offices as principal permitted uses.

4. Add Medical-support centers of limited service for uses such as diagnostic MRI facilities, wellness centers, out-patient rehabilitation centers, out-patient surgical centers as principal permitted uses to this zone.

G. C-5 Commercial/Nursing Home

After examination of the uses and lots which comprise the C-5 zone, the Planning Board has concluded that the bulk requirements and uses found in the current ordinance are fully appropriate. However, the zone is recommended to have an added requirement that access to a permitted use in this zone be limited to only Route 22. Emergency access onto a local roadway may be considered by the Board, but any such access must be strictly limited for emergency access only.

H. HIC Highway Interchange Commercial

It is recommended that bulk standards for the HIC Highway Interchange Commercial Zone substantially remain as currently constructed, and that some Ordinance deletions be adopted:

1. Delete medical office and dental office use as a permitted use since the HIC zone incorporates the C-3 uses by reference. It is recommended that medical and dental offices be deleted from the permitted uses in the HIC zone because there is sufficient distribution of these permitted uses throughout the Route 22 corridor.

2. Delete the regulations found in Section 126-314.1G (hotel room count per site area) from the Ordinance. The correlation to room count and site

acreage is not viewed as an appropriate standard for intensity of development.

3. Delete Section 126-314.1F (front yard parking in the HIC zone) from the Ordinance since it conflicts with other sections of the Ordinance.

4. Modify Section 126-314.1 (C.2) Conditional Use for new car, truck, farm machinery, construction equipment, and recreation vehicle sales to read: All existing or approved new car, truck, construction equipment, recreational vehicle, and farm machinery sales uses shall have the right to continue, the right to be enlarged on the existing lot, and the right to be rebuilt if totally destroyed.

I. LC Limited Commercial

The Planning Board has considered input from the public at workshop sessions, the location of the zone along the corridor, parking standards applicable to the zone and permitted and conditional uses of the zone. The Board has determined that there should be no modification of bulk requirements or uses in the zone.

VI. OTHER RECOMMENDATIONS AND POLICY DETERMINATIONS

A. Definitions

(1) Delete the Definition terms, Motel and Motor Hotel from the definition section of the ordinance and from the body of the Ordinance.

(2) Definitions: Indoor Commercial Recreation - Sporting activities conducted in a covered structure which includes sport activities such as swimming, soccer, archery, ice skating, ice hockey, basketball, football, tennis, baseball, rock climbing and laser tag. Indoor Commercial Recreation does not include activities such as bowling alleys, pool halls, theatres for music, theaters for live presentations or motion picture presentations, video arcades, paint ball or rifle ranges. Facilities may also include accessory eating and retail services within the facility. Inflated, 'dome' type structures are not permitted.

(3) Definitions: Gyms - An establishment that provides classes and facilities for aerobic exercises, running and jogging, exercise equipment, showers, and lockers. Retail services are limited to the sale of related accessories, drinks, packaged food, and snacks for members and guests. The area devoted to such retail sales is limited to no more than 10% of the floor area of the gym facility.

(4) Definitions: Health Club - An establishment that provides classes and facilities for aerobic exercises, running and jogging, exercise equipment, game courts, swimming facilities, saunas, showers, massage room and lockers. Health clubs may also include accessory eating (light meals and snacks) and retail services within the health club. The facility must comply with the massage spa and bodywork facility ordinance.

(5) Definitions: Wellness Center - An establishment that offers health services for the body and mind. Wellness centers usually offer skin care services and body services such as fitness, personal training and nutrition consulting. Wellness centers may offer services such as chiropractic, acupuncture, or holistic approaches toward body health. Wellness centers must be consistent with the massage spa and bodywork facility ordinance.

(6) Definitions: Day Spas - A facility providing licensed estheticians and therapists on staff offering personal services such as herbal baths, massages, deep tissue and deep muscle treatments, body packs and wraps, exfoliation, heat treatments, aroma therapy, cleansing facials and hydrotherapy. The facility must be consistent with the massage spa and bodywork facility ordinance.

(7) Definitions: Nursing Homes - A long term facility or a distinct part of a facility licensed or approved as a nursing home, infirmary unit of a home for the aged, or a governmental medical institution.

(8) Definitions: Intermediate Care Facility - A facility that provides, on a regular basis, personal care including dressing, eating, health-related care and services, to individuals who require such assistance but who do not require the degree of care and treatment that a hospital or skilled nursing facility provides.

9) Definitions: Long-Term Care Facility - An institution or a part of an institution that is licensed or approved to provide health care under medical supervision for 24 or more consecutive hours to two or more patients who are not related to the governing authority or its members by marriage, blood, or adoption.

10) Definitions: Convenience Stores - A retail establishment of up to 5,000 s.f. and open for long hours, providing quick service for take out. Convenience stores selling primarily food products, household items, newspapers and magazines, candy and beverages, and a limited amount of freshly prepared foods such as sandwiches and salads for off-premises consumption.

(11) Definitions: Conference Center - A facility used for conferences and seminars, with accommodations for sleeping, food preparation and eating, recreation, entertainment, resource facilities, meeting rooms, fitness and health center, and retail stores and services primarily for conference center guests.

(12) Definitions: Building Height - is to be modified to include the maximum height of a parapet and similar projections above the roof, which should not exceed three (3) feet above the roof line.

(13) Definitions: Extended Stay Lodging - Limited-service hotels but with larger rooms (approximately 425 square feet) and with refrigerators, cook tops, microwave ovens, dishes, utensils, and with washers and dryers on premises. The extended-stay facility is for transients staying 5 or more days, with an average of 7-10 days but not to exceed 89-days. Extended-stay hotels will have a variety of room types, including studios and one- and two- bedroom suites.

(14) Definitions: Hotel - A building designed for occupancy as a temporary residence of one or more persons who are lodged with or without meals, and where access to the room is through an interior corridor.

B. Zoning Ordinance Amendments

(1) Section 126-169 deals with parking standards. Public input during workshop meetings has raised the issue that not all parking standards can be addressed using this ordinance section. Consideration has been given to addressing minimum parking standards for uses that are located in the Route 22 corridor, and throughout the township. The requirements for particular uses may be onerous and result in the need to provide more paved area than necessary. Appropriate standards are difficult to address for all cases since scale of the use and changes in building uses over time demonstrate the need for flexibility. For example, a data center or a furniture store today may be a clothing outlet tomorrow. For this reason, it is recommended that unique circumstances be entitled to unique approaches to meet parking demands. It is recommended that the well-regarded publication by the Institute of Transportation Engineers (ITE) be used for these unique circumstances, upon acceptance of the data by the Board Engineer. A banked area for the unnecessary stalls would be required and implemented upon the direction of the township Engineer if the use were to be changed, requiring greater parking, or it was found that the parking was inadequate in the opinion of the Township Engineer. In any event, the banked parking area must include the entire lot, with all parking stalls (existing and banked) to meet all applicable

parking standards. Disagreements between the Engineer and owner may return to the Board for a determination.

(2) Structured parking (i.e., parking garages) is explicitly encouraged throughout the township for major shopping and for office uses. Requirements for screening of structured parking levels, and the vehicles within them from, view through architectural elements or other methods should be made part of the Ordinance.

(3) Clarity and relocation of the existing Highway setback requirements is recommended. Ordinance Section 126-304.3 should be shifted to be incorporated under the Ordinance section of Design Details and Criteria rather than under Use Regulations. Language should read, "Setbacks on buildings in nonresidential zones having frontage on Route 202 (west of Somerville Traffic Circle) and/or on Route 22. All principal buildings having frontage on Route 22 and/or Route 202 (west of the Somerville Traffic Circle) shall be set back a minimum of 200 feet from such highway. Parking, with respect to these properties, shall be located no closer than 100 feet from such highway."

(4) Section 126-329C, Floor Area Ratio bonus should be amended to give a one percent (1%) increase in floor area ratio for every four percent (4%) permanent decrease in impervious coverage. The permanent decrease in impervious coverage should be perfected by recorded deed restriction.

C. Policy Determinations

(1) Hillside Development. Depending on the extent of slope (topography) of a site, the Hillside Development computations may require adjustment of the build-out potential of a lot. The Board considered whether the Hillside Development computations should be based on natural grades, and exclude those areas where man-made slopes have been introduced onto a site. After input from the Board's Engineer and evaluation by the Board, the Master Plan Amendment endorses the existing Ordinance and does not recommend modification.

(2) Cut and Fill. There is concern regarding the potential for over-excavation and over-filling to such an extent that the visual character of property or the drainage characteristics of property are significantly modified. It is recommended that the Township Engineer consider the issue and offer future recommendations to the Council which will avoid the impacts of aesthetics and grading concerns.

(3) Buffers. When non-residential uses abut residential uses, buffers are required. The depths of the buffers were a topic of discussion of whether greater buffer

setbacks should be recommended. The Board Planner noted that some buffers were increased in the Ordinance as a Council response to the 2005 Master Plan Amendment. Explanation was also offered which clarified that the buffer depth is measured from the property line and that the applicable building setback line distance is applied in addition to the required buffer. The planner gave illustration of the compounded setback for several zones along the Route 22 corridor. After consideration, the Master Plan Amendment endorses the existing Ordinance and does not recommend modification.

(4) Renewable Energy. The Board endorses the concept of renewable energy.

(5) Service Stations. There was discussion regarding whether more gas service stations should be encouraged along the Route 22 corridor. Some zones along Route 22 already permit gas service stations as a conditionally-permitted use. After consideration, the Board concluded that gasoline service stations were found in the westbound lane and in the eastbound lane of Route 22. Some of the stations are in Somerville, and some are in Bridgewater. The Board concluded that this use is adequately represented, and the Master Plan Amendment endorses the existing Ordinance and does not recommend additional service stations as a permitted use in other zones.

(6) Design Guideline Recommendations for the Route 22 Corridor

The visual character of the Route 22 corridor is considered to be an important component in the identity of Bridgewater Township. The Planning Board endorses development guidelines which are intended to aid developers seeking assistance in developing an aesthetically pleasing project.

Recommended color and materials are in keeping with Planning Board workshop session preferences and recommendations in the 2005 Master Plan Amendment. The objective of the building design guidelines is to offer elements for overall high quality and complementary design of buildings. These elements are intended solely as Guidelines and not Ordinance requirements.

A. Building Mass

(1) Solid or unarticulated buildings are less desirable. Where practical, the effects of mass and scale or buildings may be reduced by introducing staggered building walls, addition of dormers, or other architectural treatments.

(2) Buildings with expansive blank walls facing the roadway are less desirable. The building should have the appearance of a functional second story if there is a need to have an interior of building with greater height.

(3) Building mass should be consistent with the size of the lot. In the case of the Route 22 corridor, a two-story structure, with mixed non-residential uses, such as retail and offices, is seen as a suitable mass for the visual value of the corridor, as opposed to a one-story structure.
(4) Building entries should be readily identifiable through the use of canopies and architectural treatment.
(5) Vaulted roofs are not encouraged.
(6) Small-scale elements, such as planter walls and hedges, are encouraged to be clustered around building entrances.
(7) Larger street-facing building planes over a certain length (e.g., 150 feet) should be broken up into horizontal components, with no individual component having a length of more than 75 feet.
(8) Green design standards (e.g., storm water management, rooftop solar, parking lot design, building design) are encouraged
(9) Visual screening of parked cars in structured parking garages is encouraged through a variety of treatments, such as decorative blocks.

B. Materials

(1) The faces of the structure which are visible from any roadway should be constructed principally with brick or stone rather than wood, metal, or cinder block. Drivet or split rib block may be used as an accent, but should be limited to no more than 10% of the façade.
(2) One dominant material shall be selected and used as a theme for each building on a site.
(3) Roof design shall be as aesthetically pleasing as possible (e.g. color, material, grouping) to minimize visual impact to adjacent uses and particularly residences.
(4) 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.
(5) Design preferences include grille windows and transoms.
(6) Crown molding, or similar roofline treatments are encouraged.
(7) Parapets, facades and similar perimeter projections should not exceed a height of 3' above the roofline.
(8) Peaks in roofline should be minimized.
(9) Design treatments which do not meet the desired characteristics are:
- Large plate glass windows without grilles.
- Front yard parking without landscape berms as a buffer.
- Massive structures which are out of scale with surrounding area.
- Shed, mansard, and highly-sloped roofs are not recommended.
- Aluminum siding, metal panels and mirrored glass surfaces are discouraged.

C. Color and Texture

(1) Variations in color on the building should be kept to a minimum and shall be consistent with a cohesive façade and signage plan.
(2) Earth tones are preferred. Bold tones should be avoided.
(3) Variation in texture is encouraged if it does not detract from the principal character of the building and theme.
(4) Exterior building wall should be "finished" on sides visible from State and local highways.

VII. RELATIONSHIP TO OTHER PLANNING DOCUMENTS

A. Bridgewater Township Master Plans

The Amendment to the Bridgewater Township Master Plan was adopted in 1990 and Reexamination reports were adopted in 1996 and 2005. Many of the goals are still applicable and provide a basis for the planning reevaluation of the Route 22 corridor. Text adjustments have been made for specific application to the Route 22 corridor.

Among the goals of the 2005 Master Plan Amendment and Reexamination report relevant to economic development on the Route 22 corridor are the following:

- To preserve the development character and quality of Bridgewater Township.
- To safeguard the tax base, provide for a continuing employment source and tax ratables through appropriate use of non-residential lands.
- To encourage the redevelopment of large industrial tracts which are no longer viable for industrial or manufacturing uses.
- To limit the development of any additional high-density multi-family housing developments unless such are dedicated for senior citizen housing.

The 2005 Master Plan Reexamination Report states that Bridgewater recognizes the need for greater efficiency in the use of land devoted to retail, but warns that while retail opportunities may grow, these uses must not negatively affect the qualify of life enjoyed by the surrounding neighborhood and by the township as a whole.

In addition, the Master Plan Amendment notes that Bridgewater is experiencing a slowing of commercial development. Past trends include an approximately 21 percent increase in properties used for commercial purposes and an approximately 40 percent decrease in vacant land consumed by commercial development between 1996 and 2003.

Master Plan Amendment recommendations applicable to the Route 22 corridor include the following:

- In limited industrial zones, many of the historic industrial uses have been redeveloped. Narrow the range of permitted uses within the zone while eliminating industrial uses such 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.
- In limited industrial zones, encourage pharmaceutical niche industries on major corridors.
- The township should identify and improve major gateway locations to enhance the image of the community.
- Update the land use plan to address areas where land uses are in transition and reinforce established residential neighborhoods, commercial zones and park/open space areas.
- 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.
- Promote the development of underutilized industrial and commercial areas that complement the variety of uses within the township.
- Coordinate land use and transportation planning to provide a comprehensive approach to development.
- Evaluate a range of available planning, zoning and implementation tools available to the township including but not limited to design standards and public-private partnerships with the goal of enhancing the quality of life for the residents of Bridgewater.
- Expand regional coordination and cooperation through the Somerset County Regional Center Strategic Plan process.
- Identify and develop guidelines to 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.
- Brownfield sites should receive increased focus for clean-up and reuse.

<u>East Gateway Area (Route 22 and I-287)</u>

- New and infill developments in the East Gateway area should be designed to incorporate the principles of transit oriented development. This would allow for the Bus Rapid Transit (BRT) service.
- 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.
- Implement access management techniques along the Route 22 corridor such as combining driveways and minimizing any new access points.
- Encourages cross-easements for access between projects.

Route 22

- Where safe and practical, available grade crossings should be bicycle and pedestrian friendly when incorporated with an engineering study of the safety of the corridor.
- At-grade railroad crossings should be eliminated, where possible.
- Land uses in the median are a safety hazard for both the customers and the regional traveling public. These uses and their access points need immediate attention. The township encourages existing uses located in the Route 22 median to be relocated to land off the median.

The Master Plan Amendment also includes a Somerset County Regional Center Element. Applicable goals, objectives and recommendations of the Plan relevant to Route 22 in Bridgewater are the following:

- Provide a balanced land use pattern in the township of residential, commercial, industrial, public/semi-public, conservation and parks/open space uses that supports residential neighborhoods, maintains and strengthens existing commercial zones, preserves some remaining industrial areas, increases parks, recreation and open space, protects environmentally sensitive natural features, accommodates community facilities and facilitates local/regional circulation without placing undue demands on infrastructure including roads.
- Reconcile the difference between the existing pattern of development and existing zoning. Assess appropriate zoning on vacant and underutilized parcels in order to determine consistency with the township "vision"

B. Bridgewater Regional Center Core Concepts

The Bridgewater Regional Center Core 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 following is a summary of applicable recommendations made for the Core:

- Develop diversity in permitted uses to promote the Core as the Township Center and a commercial destination of regional significance.
- 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 Core through balanced access. Such access would include a pedestrian-friendly streetscape, expanded walking/bicycling infrastructure, mass transit access from a Regional Center Core shuttle and improved connections to neighborhoods within the township and Regional Center.

Office Corridors

From a planning perspective, campus style office development remains appropriate given the existing land use pattern, highway access and the relatively low intensity character of the corridor. Existing front yard setbacks should be maintained. It is recommended that new development along the corridor consider mass transit service, provide shelters and bike racks, where appropriate, and create increased access through interconnections among developments.

Industrial Areas in Transition

The Township of Bridgewater has multiple industrial areas that accommodate a broad range of manufacturing, warehousing/distribution and research/laboratory uses. These areas are concentrated within the southern section of Bridgewater in the Regional Center. 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, distribution and light manufacturing uses oriented to the regional highway system, but not on state highways.

Heavy industrial activity such as the former American Cyanamid (Wyeth) complex on East 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 industrial area where Stavola Construction Materials has an established quarry and mining facility with several decades of projected capacity.

It is anticipated that Bridgewater's remaining industrial and manufacturing activity will capture higher technology and value added industrial development generated by the bio-medical, health care and pharmaceutical industry clusters found in the Regional Center and central New Jersey.

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. The major issues to be addressed include: upgrading deteriorated parcels, refining permitted uses, redeveloping vacant or underutilized industrial sites while protecting adjacent residential neighborhoods from nuisance impacts.

Mixed-use non-residential area of the Middlebrook Crossing Industrial Park should be planned as part of the Regional Center East Gateway Area consistent with the mixed-use vision established in the 1996 Township Master Plan Reexamination Report and 1999 Regional Center Vision.

Route 22 Suburban Boulevard

The Route 22 corridor through Bridgewater acts in part as the northern boundary of Regional Center. The area of this corridor east of Route 202/206 provides a large grassed and landscaped median that contains a variety of commercial land uses. The long range plan for this area is known as the "Suburban Boulevard". Study of this corridor is to be undertaken to determine what course of action should be taken to improve safety. This detailed study has not yet commenced. There are a few grade separated crossings which serves the corridor as a significant barrier between the northern and southern portions of the Regional Center. The few grade separated crossings also serve to create some of the more significant traffic bottlenecks in the Regional Center. These issues will be monitored throughout the study process.

C. Somerset County Regional Center Strategic Master Plan

Redevelopment Areas, Economic Development and Community Design

- Encourage redevelopment in focus areas that will return underutilized land to productive use, improve the quality of life, enhance community character, create new employment opportunities and strengthen the municipal tax base.
- Encourage publicly accessible parks and open space as part of redevelopment areas where appropriate.
- Improve the quality of development in the Regional Center.
- Consider establishment of special design zones and guidelines to promote high quality development.
- Promote new development that is accessible, attractive and safe.
- Ensure that new development includes appropriate landscaping, street furniture, sidewalks and access to mass transit.
- Establish gateways and coordinated design focal points in the Regional Center.
- Promote coordinated and uniform design standards.
- Focus development in the Regional Center within the downtowns and Bridgewater Core area.
- Facilitate development through a coordinated, predictable and streamlined approval process.
- Increase State incentives for development in the Regional Center.
- Address quality-of-life issues such as affordable housing and transportation to improve the business climate.
- Pursue commercial development to attract tax ratables and reduce the residential tax burden.
- Strengthen the predictability of the business development process to encourage investment in the area.
- Create facilities and programs for attracting high tech businesses and service firms, as well as research and development activities, capitalizing on the technological and pharmaceutical clusters in the Regional Center.

- Foster diverse business opportunities that strengthen the Regional Center economic base.
- Upgrade and enhance existing infrastructure to sustain and promote economic development.

D. State Development and Redevelopment Plan

The State of New Jersey has published the Delta III Map, which highlights the planning areas of Bridgewater Township. For the most part, the corridor of Route 22 and portions of 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.

Policies

The State Development and Redevelopment Plan include policies which provide recommendations to implement the goals. This element of the Master Plan Amendment advances many of these policies.

#2, Comprehensive Planning. The Economic Element of the Master Plan Amendment fulfills the goals of Statewide Policy #2, Comprehensive Planning, in being fully integrated with the Master Plan Updates of the adjacent municipalities.

Additional Statewide Policies which are tangibly advanced by the Master Plan Element 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.

#11 Water Resources: This Plan seeks to protect the Raritan River and its tributaries through the designation of greenways along stream corridors. This provides a positive environment for economic growth.

#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. This provides a positive environment for economic growth.

#19 Design: This Plan proposes economic initiatives which will identify community design improvements to maintain and enhance the quality of life of those areas, including policies to promote economic vitality.

E. Impact of Potential Future Development on Adjoining Communities

As required by the M.L.U.L., this Economic Element of the Master Plan Amendment considers the impacts of its recommendations beyond the borders of Bridgewater since actions taken along the Route 22 corridor in Bridgewater could possibly affect adjoining municipalities particularly, Raritan, Branchburg, Bound Brook, Green Brook and Somerville. Other municipalities located somewhat proximate to the corridor are Hillsborough, and Middlesex.

Development anticipated in the Route 22 corridor, in Bridgewater in accordance with the recommendations of this plan, will not negatively impact adjoining communities. As discussed, the corridor already is zoned to permit non-residential development, including areas adjacent to other municipalities. Proposed land uses would be compatible with land use patterns in the area. There is also no expectation that any new development that would result from implementation of this plan would burden any adjacent municipalities based on noise, light, economic or other impacts of development. Recommended land use changes are only proposed where such uses would be appropriate from both the local and regional context, and are not intended to undermine other planning efforts in the surrounding area.

Bridgewater Township borders eleven municipalities. Implementation of this economic element of the Master Plan Amendment will not significantly affect the municipalities abutting Bridgewater Township. Zoning recommendations and ordinance controls are adequate to address buffering against these abutting municipalities.

Branchburg Township

Branchburg Township borders Bridgewater Township to the west as well as Hillsborough Township and Bedminster Township. The jurisdiction between Branchburg and Bridgewater is defined by the North Branch of the Raritan River. Along this river are large areas of floodplain 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. There are no Bridgewater policies or objectives which would negatively impact 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.

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 which stimulates awareness to the commercial opportunities.

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 zone and a former industrial area of Manville. However, redevelopment in Manville and in Bound Brook will likely generate increased traffic on Finderne Avenue, a main artery between Manville and Bound Brook. 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 ambiance which is an asset to economic growth.

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. The zoning along the Route 22 corridor as it extends into Bound Brook is non-residential, except for a severely-sloped, wooded parcel which is not readily accessible from Route 22 and which holds very little residential development potential in light of the lack of sewers, steep slopes and highly wooded nature of the land. There are no proposed zoning changes along the common line with Bound Brook Borough.

As with the Branchburg boundary, signage and design treatments on Route 28 can help to establish gateways for both Bridgewater and Bound 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 impacts 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. No cross-border impacts are expected from the recommendations in the Master Plan Element.

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 are no economic aspects of the policies and objectives of the Master Plan Amendment which would have a negative effect on the Borough of South Bound Brook.

Hillsborough Township

A small portion of Bridgewater borders Hillsborough Township on the south. The Raritan River forms the boundary between the two townships. The 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. Just north of the boundary is the small village of Pluckemin which lies wholly within Bedminster Township. The village of Pluckemin is a commercial and office center. To the west of Pluckemin are residential neighborhoods and to the east of Route 202/206, 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 these environmentally-sensitive slopes. There are no anticipated policies of disconnect between these two communities.

Warren Township

Along the common line with Warren Township are 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 the Master Plan Amendment which would negative 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.

F. Communities within the Regional Center

The Master Plan Amendment is consistent with the Regional Center Strategic Plan for Bridgewater, Somerville and Raritan. The Goals and Recommendations included in the Master Plan Amendment support the broader Goals and Recommendations of the Strategic Plan.

The Regional Center Strategic Plan (RCSP) provides a coordinated framework for planning for its three constituent municipalities. The recommendations in the Regional Center Strategic Plan are based on 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 does not recommend strong intensification 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. This recognizes the symbiotic relationship between existing and future conditions in Bridgewater and those in Somerville and Raritan.

VIII. SCHEDULE OF AREA, YARD AND BUILDING REQUIREMENTS

The revised Schedule of Area, Yard and Building Requirements Chart has been incorporated into the Master Plan Amendment. This Chart will be updated if the new, recommended zones are adopted into the Ordinance.

SCHEDULE OF AREA, YARD AND BUILDING REQUIREMENTS
TOWNSHIP OF BRIDGEWATER, SOMERSET COUNTY, NEW JERSEY

1	2	3	4	5	6	7	8	9	10	11	12	13	14	15
	Minimum Size of Lot				Minimum Yard Requirements (feet) (b)						Maximum Percent of Improved Lot Coverage (see note d)	Maximum Height		Max Floor Area Ratio (FAR)
	Interior Lots		Corner Lots		For Principal Buildings				For Accessory Structures					
Zone	Area (square ft/ acres)	Width (feet)	Area (square ft/ acres)	Width (feet)	Front Yard	One Side Yard	Total of Two Side Yards	Rear Yard	Side Yard	Rear Yard		Stories	Feet	
R-50	50,000	165	55,000	200	75	25	70	85	252	253	18	2.5	35	0.18
R-40	40,000	150	45,000	170	50	20	50	75	20	20	18	2.5	35	0.18
R-20	20,000	100	24,000	120	50	20	50	50	20	20	25	2.5	35	0.16
R-10	10,000	100	12,000	120	30	15	40	20	15	10	35	2.5	35	0.25
R-10A	10,000	80	10,000	100	25	15	30	20	15	10	35	2.5	35	0.25
R-10B	6,000	60	7,500	75	20			25	15	10	35	2.5	35	0.25
Twin houses						0	20							
Patio Houses						3	20							
R-10C	10,000	100	12,000	120	25	See note C	See note C	25	15	10	50	2.5	35	0.25
R-10.1 Single Family	10,000	100	12,000	120	30	15	40	20	15	10	35	2.5	35	0.25
R-10.1 -Cluster	See 126-308.3.1B & 126-349 for cluster subdivision option													
R-20.1	20,000	100	24,000	120	50	20	50	50	See 126-304.4		25	2.5	35	0.16
R-40A -Single family	40,000	150	45,000	170	50	20	50	75	20	20	15	2.5	35	0.15
R-40A -Professional	2 acres	100			75	20 ft each	50	125			45	2	30	0.07
R-40B -Single family	40,000	150	45,000	170	50	20	50	75	20	20	15	2.5	35	0.15
R-40B -Professional	7 acres	200			50	50	50	50			45	2.5	35	0.07
50-ft for the principal building is required on all property lines except when existing residences are converted to business where the existing setback shall remain if less than 50-ft														
R-40C -Single family	40,000	150	45,000	170	50	20	50	75	20	20	15	2.5	35	0.15
R-40C -Professional	2 acres	200			50	50	50	50			45	2.5	35	0.07
50-ft for the principal building is required on all property lines except when existing residences are converted to business where the existing setback shall remain if less than 50-ft														
R-40/MDU-1	50,000	165	55,000	200	75	25	70	85	25	25	15	2.5	35	0.16
R-MDU-10.5	See 126-321.3 Also see note K below													
R-MDU-5	See 126-321.3 Also see note K below													
R-MDU-6	See 126-321.3 Also see note K below													
R-MDU-8	See 126-321.3 Also see note K below													
R-40/PURD	6000	60	7000	70	20	5	18	24	15	10	40	2.5	35	
AAR	19.4 acres	350	See 126-321.5 for requirements								40	2.5	35	
C-1	40,000	100	40,000	120	25	See note C	See note C	25			50	2.5	35	0.15
C-1A	5 acres	300	5 acres	300	20	20	40	20	20	20	70	2.5	35	0.20
C-2	10 acres	500	10 acres	500	100	100	200	100	100	100	60	3	45	0.20
C-2 (BRC)	See 126-320.2 for requirements													
C-3	5 acres	300	5 acres	300	100	75	175	75	75	75	60	3	45	0.30
C-3A	30,000	100			75	50	100	50			50	2.5	35	0.15
C-3B	2 acres	170			100	50	See note I	100			50	2	28	See note J
C-4	5 acres	200	5 acres	200	25	20	40	20	20	20	50	2.5	35	0.15
C-5	3 acres	200	3 acres	200	75	50	100	75	50	50	40	2	35	0.25
C-6	10,000	100	12,000	120	25	See note C	See note C	25	n/a	n/a	70	2.5	35	0.25
GCE	150 acres	350			250	75	200	75	75	75	20	2	35	0.2
GCM	5 acres	200	5 acres	200	100	50	100	75	75	75	60	3	45	0.35
HC - Hotels	6 acres	400			100	50	100	50			60	5	60	0.4
HC - Other uses	6 acres	400			100	50	100	50			60	3	45	0.2
HIC - Hotels	5 acres	200	5 acres	200	100	50	100	75	75	75	60	4	45	0.35
HIC - Other uses	5 acres	200	5 acres	200	100	50	100	75	75	75	60	3	45	0.35

SCHEDULE OF AREA, YARD AND BUILDING REQUIREMENTS
TOWNSHIP OF BRIDGEWATER, SOMERSET COUNTY, NEW JERSEY

1	2	3	4	5	6	7	8	9	10	11	12	13	14	15
	Minimum Size of Lot				Minimum Yard Requirements (feet) (b)						Maximum Percent of Improved Lot Coverage (see note d)	Maximum Height		Max Floor Area Ratio (FAR)
	Interior Lots		Corner Lots		For Principal Buildings				For Accessory Structures					
Zone	Area (square ft/ acres)	Width (feet)	Area (square ft/ acres)	Width (feet)	Front Yard	One Side Yard	Total of Two Side Yards	Rear Yard	Side Yard	Rear Yard		Stories	Feet	
LC	10 acres	300	10 acres	300	50		See 126-320.1				60	3	45	0.3
M-1	10 acres	500	10 acres	500	150	75	175	100	75	100	60	3	45	0.35
M-1A	5 acres	200	5 acres	200	100	50	100	75	75	75	60	3	45	0.35
M-1B	2 acres	200	2 acres	300(Note E)	60	50	100	50	75	75	60	2	35	0.35
M-2	20 acres	500	20 acres	500	150	75	175	100	75	100	60	3	45	0.35
M-3*	100 acres	500	100 acres	500	200	100	200	200	100	200	20	-	50	0.10
MPD	35,000	160	35,000	160	40	25	50	25	15	10	60	3(Note F)	35(Note F)	.22(Note G)
P	30,000	100	30,000	100	50	20	40	20	20	20	60	2.5	35	0.40
P-2	20,000	100	20,000	100	50	20	40	25	20	25	50	2.5	35	0.25
PCD/COP							See 126-345.1							
PRCPD	20 acres	500	20 acres	500	150	75	175	100	75	100	60	3	45	0.35
SC/HD	4 acres	200**	4 acres	250**	75**	50**	100**	50	50	50	60	7	80	
SC - R	17 acres	100			20(Note H)			25			50	2.5	35	0.6
SC/MD	5 acres	100			35	35	70	75			60	2.5	35	0.35
SED	30 acres	500	30 acres	500	200	50	150	100	75	75	50	3	45	0.20

NOTES:

* No quarrying shall occur within one hundred fifty (150) feet of any property or street line

** Where a development contains more than one principal structure which is adjacent to an existing similar use, the lot width, side and front yard setbacks shall be determined as one integrated development and the individual structures shall not be considered to be on separate lots. However, the principal structures must be separated by a distance not less than the combined height of both structures **(Added 7-16-1990 by Ord. No. 90-19)**

*** All principal buildings having frontage on Route 22 and/or Route 202 (West of Somerville Traffic Circle) shall be set back a minimum of 200 feet from such highway. Parking with respect to these properties, shall be located no closer than one-hundered-foot setback from such highway.

(A) Minimum area requirements for all zones may be affected by other Township codes and ordinances and articles of this chapter, such as Hillside Development Article, Stormwater and Floodplain Article and Soil Erosion and Sediment Control Article. In any residential zone, except R-50, without public water and public sewer, the area and dimensional requirements of the R-40 Zone shall be applied.

(B) Side and rear yard requirements may be reduced to ten (10) feet where the side or rear yard abuts an interstate highway or railroad.

(C) None required except when abutting a residential zone or if residences are included as part of any C-1 commercial use, the side yards required under the R-10 Zone shall be used

(D) See 126-329C for FAR bonus for decreases in improved lot coverage

(E) Corner lots must have one (1) width of at least three hundred (300) feet. **(Added 6-6-1983 by Ord. No. 83-12)**

(F) Reserved

(G) Floor area ratio of .22 shall apply to all uses except for skilled nursing home and continuing-care facility, which shall be subject to the following regulation: The density shall not exceed 16 individual living units per acre. **[Added 12-21-1987 by Ord. No. 87-49]**

(H) Minimum front yard shall be 75-ft from East Main Street

(I) The driveway side yard shall have a minimum of 30-ft

(J) Maximum FAR for 2-4 acres of land is 0.10; 4-8 acres is 0.12; Over 8 acres is 0.15

(K)- All MDU ZONES

Type	Min Lot Area (s.f)	Min Lot Width	Min Yard Front	Min Side One/Both	Min Yard Rear	Max Lot Coverage	Maximum Height	Max FAR
Single Family Detached	7500	75	25	10 & 25	25	25%	35	0.25
Single Family Patio	6000	60	25	3 & 20	25	30%	35	0.25
Townhouse	1280*	16	20	n/a	20	60%	35	1.2
Multifamily						35%	38**	0.4

* For fee simple units

** For Multifamily structures, building height shall be defined as the ground elevation around the foundation to the level of the highest point of the roof surface if the roof is flat; or in the case of sloping roofs, to a point 1/2 the vertical distance between the top of the uppermost plate and the highest point of the roof For structures with changes in roof heights, separate measurements may be made for each roof section. No multifamily structure shall exceed 3 stories in height.

APPENDIX A - CURRENT ZONING ALONG ROUTE 22

Current C-3 Office and Service Zone

A. Principal Permitted Uses.

(1) Business, professional and service offices and establishments, such as banking and bank-related functions; credit services; security and commodity brokers and dealers; insurance carriers and agents; real estate services; photographic services; advertising services, employment agencies; consumer and mercantile credit and collection services; duplicating, mailing and stenographic services; consulting services; data processing; medical and dental services and laboratories; nursing homes and assisted living facilities; engineering and architectural services; accounting and bookkeeping services and research activities.

(2) Any form of agriculture or horticulture, including the storage or sale of farm products where produced.

(3) Essential services.

(4) Nursing homes and assisted living facilities.

B. Permitted Accessory Uses.

(4) Other uses and structures customarily incidental to a principal permitted use.

(5) Public and private parking.

(6) Signs.

C. Conditional Uses.

(1) Accessory retail services within professional business and research offices.

(2) Child-care centers as part of professional business and research offices.

Bulk Standards.

Minimum Lot Size	5 acres
Front Yard Setback	200 feet (Route 22/202)
Maximum Height	3 stories/45 feet
Maximum FAR	0.30

Current C-5 Commercial/Nursing Home Zone

A. Principal Permitted Uses.
(1) Nursing homes, continuing-care retirement facilities, congregate-care facilities, assisted-living housing and senior housing.
(2) General offices and medical/dental office.

B. Permitted Accessory Uses.
(1) Other uses and structures customarily incidental to a principal permitted use.
(2) Public and private parking lots.

C. Conditional Uses.
(1) Service stations.

Bulk Standards.

Minimum Lot Size	3 acres
Minimum Lot Width	200 feet
Front Yard Setback	75 feet
Minimum One Side	50 feet
Minimum Total Side Yard	100 feet
Minimum Rear Yard	75 feet
Maximum Impervious Coverage	40%
Maximum Height	2 stories/35 feet
Maximum FAR	0.25
Minimum Buffers	50 feet

Current GCM General Commercial Manufacturing Zone

A. Principal Permitted Uses.

(1) Office and service uses as permitted in the C-3 Zone.
(2) Manufacturing, laboratory, printing and publishing uses.
(3) Research laboratories.
(4) Essential services.
(5) Any form of agriculture or horticulture, including the storage or sale of farm products where produced.

B. Permitted Accessory Uses.

(1) Other uses and structures customarily incidental to a principal permitted use.
(2) Public and private parking.
(3) Signs.

C. Conditional Uses.

(1) New car, truck, farm machinery, construction equipment and recreation vehicle sales.
(2) Service stations.
(3) Animal hospitals and animal kennels.
(4) Accessory retail services within professional business and research offices.
(5) Child-care centers as part of professional business and research offices.

Bulk Standards.

Minimum Lot Size	5 acres
Front Yard Setback	100 feet
Maximum Height	3 stories/45 feet
Maximum FAR	0.35

Current HC Hotel Conference Center Zone

A. The HC Zone allows business, office, hotel and conference center uses.

B. Principal Permitted Uses.

(10) Business, professional and corporate offices.
(11) Hotels.
(12) Conference centers.
(13) Restaurants, only if incorporated into another principal permitted use.
(14) Existing restaurant and banquet center uses.

C. Permitted Accessory Uses.

(5) Uses customarily incidental to the principal permitted uses, including but not limited to auditoriums, swimming pools, tennis courts, health clubs and retail and service stores. All accessory uses are to be located within the same building(s) as the principal use(s), except that tennis courts and swimming pools may be located outdoors.

D. Supplemental Regulations

(2) Design criteria. Development in this zone shall be designed in an integrated, cohesive fashion that will provide pedestrian and vehicular links among the various principal permitted uses selected for development. The standards and principles for design set forth in Part 8 of this chapter shall be used in the design of developments in this zone.
(3) Environmental credits. The density computation factors contained within this section shall incorporate the requirements of § 126-266 relating to floor area modification due to excessive slopes. No floor area ratio credits shall be given for lands identified as wetlands or located within a flood hazard area.

Bulk Standards.

Minimum Lot Size	6 acres
Maximum FAR	0.40 for Hotels; 0.20 for all other uses.
Maximum Height	5 stories/60 feet for Hotels; 3 stories/ 45 feet for all other uses.
Minimum Lot Width	400 feet
Minimum Front Yard	100 feet
Minimum Side Yard	50 feet (each)
Minimum Rear Yard	50 feet
Maximum Lot Coverage	60%

Current HIC Highway Interchange Commercial Zone

A. Principal Permitted Uses.
- (1) Office and service uses as permitted in the C-3 Zone
  - (a) Business, professional and service offices and establishments, such as banking and bank-related functions; credit services; security and commodity brokers and dealers; insurance carriers and agents; real estate services; photographic services; advertising services, employment agencies; consumer and mercantile credit and collection services; duplicating, mailing and stenographic services; consulting services; data processing; medical and dental services and laboratories; nursing homes and assisted living facilities; engineering and architectural services; accounting and bookkeeping services and research activities.
  - (b) Any form of agriculture or horticulture, including the storage or sale of farm products where produced.
  - (c) Essential services.
  - (d) Nursing homes and assisted living facilities.
- (2) Hotels and motels.

B. Permitted Accessory Uses.
- (1) Other uses and structures customarily incidental to a principal permitted use.
- (2) Private and public parking, including parking garages.
- (3) Signs.
- (4) Indoor and outdoor swimming pools, tennis courts and other facilities customarily accessory to hotels/motels.
- (5) Auditoriums.

C. Conditional Uses.
- (1) Service stations as regulated under Section 126-352, personal service uses, such as barbershops and beauty salons, child-care centers, blueprint, photostat and duplicating centers, travel agencies, computer service and data processing centers are permitted on properties two acres or greater, but less than four acres, with a minimum lot width of 150 feet, subject to the following minimum yard requirements.
  - (a) Minimum front yard: 100 feet.
  - (b) Minimum side yard: 35 feet.
  - (c) Minimum total of two side yards: 70 feet.
  - (d) Minimum rear yard: 50 feet.
- (2) New car, truck, farm machinery, construction equipment and recreation vehicle sales.
- (3) Inns, cocktail lounges and restaurants, excluding drive-in and drive-through-type fast food establishments, in conjunction with a hotel or motel use either as an internal operation or a separate structure on the same site.

Current HIC Highway Interchange Commercial Zone (continued)

ment, including a hotel or motel, restaurant and related supporting service uses, is permitted if it meets the following conditions, in addition to the other HIC Zone requirements.

(4) Accessory retail services within professional business and research offices.

(5) Child-care centers as part of professional business and research offices.

D. All uses in the HIC Zone must have direct access to a state highway. Direct access to a public street servicing residential zones is prohibited.

E. Motels and hotels shall be permitted four stories and be within the maximum height limit.

F. No parking is permitted in the first 50 feet of the front yard setback.

G. One hotel or motel room is permitted per 1,333 square feet of site area in a mixed development complex.

Bulk Standards.

Minimum Lot Size	5 acres
Minimum Lot Width	200 feet
Minimum Front Yard Setback	100 feet
Minimum One Side Yard	50 feet (each)
Minimum Rear Yard Setback	75 feet
Maximum Impervious Coverage	60%
Maximum Height	4 stories/45 feet (Hotels); 3 stories/45 feet (all other uses)
Maximum FAR	0.35

Current M-1A Limited Manufacturing Zone

A. Principal Permitted Uses.
- (1) Principal Permitted Uses Allowed in GCM zone.
  - (a.) Office and service uses as permitted in the C-3 Zone.
  - (b.) Manufacturing, laboratory, printing and publishing uses.
  - (c.) Research laboratories.
  - (d.) Essential services.
  - (e.) Any form of agriculture or horticulture, including the storage or sale of farm products where produced
- (2) (Reserved)
- (3) Trucking terminals.
- (4) Warehouses.
- (5) (Reserved)
- (6) Essential Services.
- (7) (Reserved)
- (8) Multimedia production such as graphic design and web-based services, high-technology business incubation, adult medical day care and limited retail uses subject to the requirements that they are accessory in size and scale to permitted uses.

B. Permitted Accessory Uses.
- (1) Other uses and structures customarily incidental to a principal permitted use.
- (2) Public and private parking.
- (3) Signs.

C. Conditional Uses.
- (1) Accessory retail services within professional business and research offices.
- (2) Child-care centers as part of professional business and research offices.
- (3) Conditional Uses allowed in GCM Zone.
  - (a.) New car, truck, farm machinery, construction equipment and recreation vehicle sales.
  - (b.) Service stations.
  - (c.) Animal hospitals and animal kennels.
  - (d.) Accessory retail services within professional business and research offices.
  - (e.) Child-care centers as part of professional business and research offices.

Bulk Standards.

Minimum Lot Size	5 acres
Front Yard Setback	200 feet (Route 22/202)
Maximum Height	3 stories/45 feet
Maximum FAR	0.35

Current M-1B Limited Manufacturing – Small Lot Zone

A. Principal Permitted Uses.

(1) Business offices.

(a) Maximum lot area for business use is no more than four acres per freestanding structure.

(b) Maximum office floor area for business office use is 50,000 square feet.

(c) Offices as an accessory use to other permitted uses in this zone area not regulated as to lot, area and building size.

(2) Manufacturing.

(3) Research laboratories.

(4) Animal hospitals.

(5) Warehouses and mini-warehouses.

(6) Storage facilities.

(7) Private security vaults.

B. Permitted Accessory Uses.

(1) Restaurant facilities totally integrated with permitted uses to primarily serve occupants and patrons of permitted uses in this zone.

(2) No freestanding restaurant structure will be permitted.

(3) No restaurant shall have more than 2,000 square feet of floor area for patron service or occupy more than 10% of any permitted structure.

(4) Satellite dishes, special electronic power equipment, and other technological equipment uses serving a principal use are permitted.

C. Conditional Uses.

(1) Service stations may be located only at intersections of area collectors and minor roads.

(2) Accessory retail services within professional business and research offices.

(3) Child-care centers as part of professional business and research offices.

D. Additional Requirements in the M-1B Zone. Uses in the M-1B Zone shall be subject to the following additional requirements:

(1) Transfer of coverage and floor area credits. To encourage the maximum variety of small businesses and flexibility of site design, property owners with more than eight acres in the M-1B District are permitted additional impervious coverage of up to 80% and additional floor area of up to 45% in exchange for a deed restriction on a similar-sized lot or lots reducing the amount of coverage and floor area in the same amount as the increased development approved elsewhere on the applicant's property in the zone, provided that said properties have no other development constraints.

(2) Land donated for public use will not alter permitted development intensity. Right-of-way dedication for state highways and municipal roads and land

donated for other public facilities given in accordance with this adopted M-1B District plan will not adversely affect a site's permitted development intensity. In other words, allowable floor area ratio, coverage, etc., will remain the same after dedication and setbacks will be calculated from the present right-of-way.

(3) Compliance with zone plan. Each use in the M-1B Zone will be required to comply with the zone plan for off-tract improvements, storm water control, design features and site amenities.

(4) There shall be a one-hundred-foot parking setback on Route 22. Parking will be permitted in one front yard (if screened) on corner lots only. No other parking shall be permitted in required front yard areas.

Bulk Standards.

Minimum Lot Size	2 acres
Front Yard Setback	60 feet
Maximum Height	2 stories/35 feet
Maximum FAR	0.35

Current LC Commercial Zone

A. Principal Permitted Uses.

(1) Retail stores and shops (excluding auto repair and auto service uses), personal and business service, medical, business or professional offices, financial service and banks, restaurants (except restaurants with drive-through facilities), hotels and motels, movie theaters and auditoriums, commercial recreational facilities, recreational open space, community facilities and child-care centers.

B. Permitted Accessory Uses.

(1) Other uses and structures customarily incidental to a permitted use as set forth above in Subsection A(1). Flagpoles, clock towers, outdoor kiosks, vending pavilions and similar physical features are permitted. Public and private parking.

(2) Public and private parking in accordance with the parking regulations in accordance with § 126-169.

(3) Signs pursuant to §§ 126-162 and 126-195, except as otherwise designated herein.

Bulk Standards.

Minimum Lot Size	10 acres
Minimum Lot Width:	300 feet
Front Yard Setback	200 feet from public right-of-way of any state or interstate highway; 50 feet from right-of-way of any other public street or highway; 10 feet from the curb line of any internal street or drive.
Maximum Impervious Coverage:	60%
Maximum Height	3 stories/45 feet
Maximum FAR	0.30
Maximum Floor Area:	60,000 s.f. for any single floor in any single retail building (excludes hotels/ motels, movie theatres, auditoriums and recreational facilities)