Town of Riverhead

Peconic River/Route 25 Corridor

Step II BOA Nomination Study

April 2016

This study was funded by the New York State Department of State through the Brownfield Opportunity Areas Program

TOWN OF RIVERHEAD
PECONIC RIVER/ROUTE 25 CORRIDOR

Brownfield Opportunity Area (BOA)
Final Step II – Nomination Study

Town of Riverhead
Suffolk County, New York

Prepared by:
Nelson, Pope & Voorhis, LLC
572 Walt Whitman Road
Melville, NY 11747
Phone: 631.427.5665
Contact: Kathryn J. Eiseman, AICP
www.nelsonpopevoorhis.com

In association with:
Nelson & Pope and
Hawkins, Webb & Jaeger
572 Walt Whitman Road
Melville, NY 11747
Phone: 631.427.5665

Sustainable Long Island
399 Conklin Street, Suite 202
Farmingdale, New York 11735
Phone: 516.873.0230

Marketing by Graphic Image Group, East Hampton, NY

April 2016

This document was prepared for the Town of Riverhead and the New York State Department of State with state funds provided through the Brownfield Opportunity Areas Program.

TABLE OF CONTENTS

EXECUTIVE SUMMARY vi
1.0 DESCRIPTION OF THE PROPOSED PROJECT AND BOUNDARY 1
1.1 Lead Project Sponsors 1
1.2 Project Overview and Description 3
1.2.1 Previous Planning Studies 9
1.2.2 Potential Brownfield Sites 14
1.3 Community Vision, Goals and Objectives 14
1.4 Brownfield Opportunity Area Boundary Description and Justification 17
2.0 COMMUNITY PARTICIPATION PLAN & TECHNIQUES TO ENLIST PARTNERS 19
2.1 Introduction 19
2.2 Steering Committee Involvement 21
2.3 Public Open Houses 23
2.4 Community Survey 25
2.5 Interviews 28
2.6 Focus Groups 30
2.7 Resources 32
3.0 ANALYSIS OF THE BROWNFIELD OPPORTUNITY AREA 36
3.1 Community and Regional Setting 36
3.2 Inventory and Analysis 43
3.2.1 Land Use and Zoning 43
3.2.2 Brownfield, Abandoned and Vacant Sites 65
3.2.3 Strategic Sites 75
3.2.4 Land Ownership 82
3.2.5 Parks, Recreation and Open Space 84
3.2.6 Historic Resources and Archaeologically Significant Areas 86
3.2.7 Transportation Systems and the TOD Growth Plan 90
3.2.8 Infrastructure 101
3.2.9 Natural Resources and Environmental Features 111
3.3 Demographics 124
3.4 Economic and Market Trends Analysis 137
3.5 Development and Analysis of Alternative Development Scenarios 158
4.0 SUMMARY OF ANALYSIS, FINDINGS & RECOMMENDATIONS 162
4.1 Land Use, Zoning, and WSRR 162

4.1.1 Western Subarea 166
4.1.2 Central Subarea 168
4.1.3 Downtown Subarea 172
4.1.4 Eastern Subarea 178
4.1.5 Sustainable Development Density Bonus 180
4.1.6 Transfer of Development Rights Program 180
4.1.7 Potential Candidates for Site Assessment Funding 181
4.2 Water Resources 184
4.2.1 Expanded Sewage Treatment 184
4.2.2 Surface Water Quality Improvements 184
4.3 Transportation 195
4.3.1 Traffic 195
4.3.2 Parking 200
4.3.3 Pedestrian and Bicycle Plan 201
4.4 Cultural, Historic and Recreational Resources 202
4.5 Placemaking 203
4.5.1 Marketing 205
4.5.2 Signage 209
4.5.3 Need for Focal Elements 210
4.6 Funding 211
4.6 Actions Required to Facilitate Development in the BOA Study Area 217

LIST OF TABLES

1-1 Community Economic Distress Indicators and Ranks in Suffolk County, 2008-2012 9
2-1 Key Dates and Topics of Steering Committee and Working Group Meetings 20
2-2 Types of Businesses, Attractions, Improvements and Events People Believe Would Benefit Riverhead 28
3-1 Summary of Previous Plans and Relevant Information for the BOA Nomination 41
3-2 Land Use 60
3-3 Facilities of Potential Concern Identified in the Toxics Targeting Report 69
3-4 Potential Brownfields, Vacant and Underutilized Sites 71
3-5 Recommended BOA Strategic Sites 77
3-6 Water Quality Data Summary 118
3-7 Total Population and Projections, 2000-2020 125
3-8 Population Age, 2010-2020 128
3-9 Total Households and Change, 2000-2020 129
3-10 Total Household Change, 2000 – 2020 129
3-11 Average Household Size, 2000-2020 130
3-12 Median Household Income Projections 131
3-13 Per Capita Income Projections 131

3-14 Households by Income Level, 2015-2020 ... 132
3-15 Disposable Household Income ... 134
3-16 Disposable Income by Age of Householder ... 135
3-17 Housing Units by Occupancy Status and Tenure ... 137
3-18 Change in Business Establishments - Suffolk County, 1998 – 2012 ... 140
3-19 Change in Paid Employees – Suffolk County, 1998 – 2012 ... 141
3-20 Fastest Growth Occupations - Top Twelve by Greatest Percent of Increase ... 142
3-21 Fastest Growth Occupations - Top Twelve by Greatest Number of Jobs ... 143
3-22 Demographic Summary, 2015-2020 ... 145
3-23 Retail Goods & Services Expenditures ... 146
3-24 2020 Projected Expenditures for Primary Market ... 147
3-25 Market Share ... 148
3-26 2020 Projected Additional Downtown Expenditure ... 148
3-27 Additional Supportable Retail/ Commercial, 2018 ... 149
3-28 Annual Visitors and Possible New Downtown Expenditures ... 152
3-29 Business Summary Comparison of Downtowns ... 154
3-30 Top Tapestry Segments in Primary Market Area ... 155
3-31 Common Spending Pattern and Preferences of Top Three (3) Tapestry Segments in Primary Market Area ... 157
4-1A Development Sites ... 163
4-1B Potential Candidates for Site Assessment Funding ... 181
4-2 Estimate of Pollutant Load Attenuation Achieved Through Green Infrastructure ... 193
4-3 Placemaking Goals and Recommendations ... 204
4-3 Funding for Businesses ... 213
4-4 Funding for Government ... 215

LIST OF CHARTS

3-1 Average Annual Change in Population, 2000-2020 ... 126
3-2 2010 Median Age Pie Charts ... 127
3-3 Primary Market Household Income Projection ... 133
3-4 Secondary Market Household Income Projection ... 133
3-5 2010 Housing Units by Occupancy Status ... 136

LIST OF FIGURES

0-1 Boundary Map ... vii
1-1 Community Context Map ... 4
1-2 Study Area Context Map ... 5
1-3 BOA Boundary Map ... 6
1-4 BOA Subareas ... 8
3-1A Land Use – Western Subarea ... 46
3-1B Land Use – Central Subarea ... 47
3-1C Land Use – Downtown Subarea ... 48
3-1D Land Use – Eastern Subarea ... 49
3-2 Zoning Map ... 50
3-3 Wild, Scenic & Recreational River Corridor Designations ... 53
3-4 Business Improvement District ... 54
3-5A East Main Street Urban Renewal Area ... 55
3-5B Railroad Street Urban Renewal Area ... 56
3-6 Historic Districts and Cultural Features Map ... 57
3-7 Arts District ... 58
3-8 Parking District ... 59

3-9A Potential Brownfields, Vacant and Underutilized Sites 74
3-9B BOA Strategic Sites 76
3-10 Public Ownership Map 83
3-11 Parks & Open Space 85
3-12A Transportation Network 91
3-12B Sidewalks and Bicycle Routes 94
3-12C Recommended Expanded Bicycle 97
3-12D Bus and Rail Service 98
3-13A Infrastructure Map: Water District 102
3-13B Infrastructure Map: Sewer District 104
3-13C Infrastructure Map: Stormwater 110
3-14 Groundwater Elevations 113
3-15 Depth to Groundwater 114
3-16 Wetlands 116
3-17 Surface Water Quality Sampling Stations 117
3-18 FEMA Flood Zones 120
4-1A Green Infrastructure Opportunities Western Sites 187
4-1B Green Infrastructure Opportunities Western Sites 2 188
4-1C Green Infrastructure Opportunities Central Sites 189
4-1D Green Infrastructure Opportunities Downtown Sites 190
4-1E Green Infrastructure Opportunities Eastern Sites 191
4-1F Green Infrastructure Opportunities Details 192

Plate 1 Issues and Opportunities
Plate 2 Alternative Development Scenarios

APPENDICES

A. Community Survey Summary
B. WSRR Community Designation
B-1 October 2014 Riverhead submission to NYSDEC for Community Designation
B-2 April 2016 Riverhead amended submission to NYSDEC for Community Designation
C. Historic Inventory for 2nd Street National Register District
D. Toxics Targeting Information Source Guide
E. Profile Sheets
F. SONIR
G. Natural Heritage Program Response
H. Economic and Market Analysis Supporting Data
H-1 Suffolk County Business Patterns
H-2 NYSDOL Long Term Occupational Employment Projections, 2010-2020
H-3 Expenditure Analysis (2015-2020) for Primary Market
H-4 Retail Market Place Profiles
H-5 Downtown Market Share
H-6 Primary and Secondary Market Area Retail Marketplace Profiles
H-7 Tapestry Segmentation Area Profile
I. Alternative Development Scenarios
I-1 Development and Analysis of Alternative Development Scenarios
I-2 IMPLAN Economic Impact Analysis
I-3 LEED 2009 Minimum Program Requirements

EXECUTIVE SUMMARY

Background and History

On April 20, 2011, the NYS Department of State announced that the Town of Riverhead had been awarded a grant through the New York State Department of State (NYSDOS) for the preparation of a Brownfield Opportunity Area (BOA) Step II Nomination Study. On May 24, 2012, the Town of Riverhead Town Board (Town Board) issued a Request for Proposals and on February 5, 2013 the Town Board resolved to authorize the Supervisor to sign a contract with Nelson, Pope & Voorhis, LLC (NP&V) to prepare the BOA Step II Nomination Study. A Draft Nomination Study was completed in December of 2015 and this document reflects comments received from the NYSDOS and Town of Riverhead.

This Nomination Study represents a culmination of analysis, community input and many hours of dedication by the Town of Riverhead Community Development Agency Executive Director, the Town Board, and the representatives of the project's Steering Committee.

Study Area

The Town of Riverhead Peconic River/Route 25 Corridor BOA Study Area is approximately 495 acres in size and runs along Main Street on the north side of the Peconic River from the eastern end of the Long Island Expressway through downtown Riverhead and including the west end of Hubbard Avenue (see **BOA Boundary Map** on the following page).

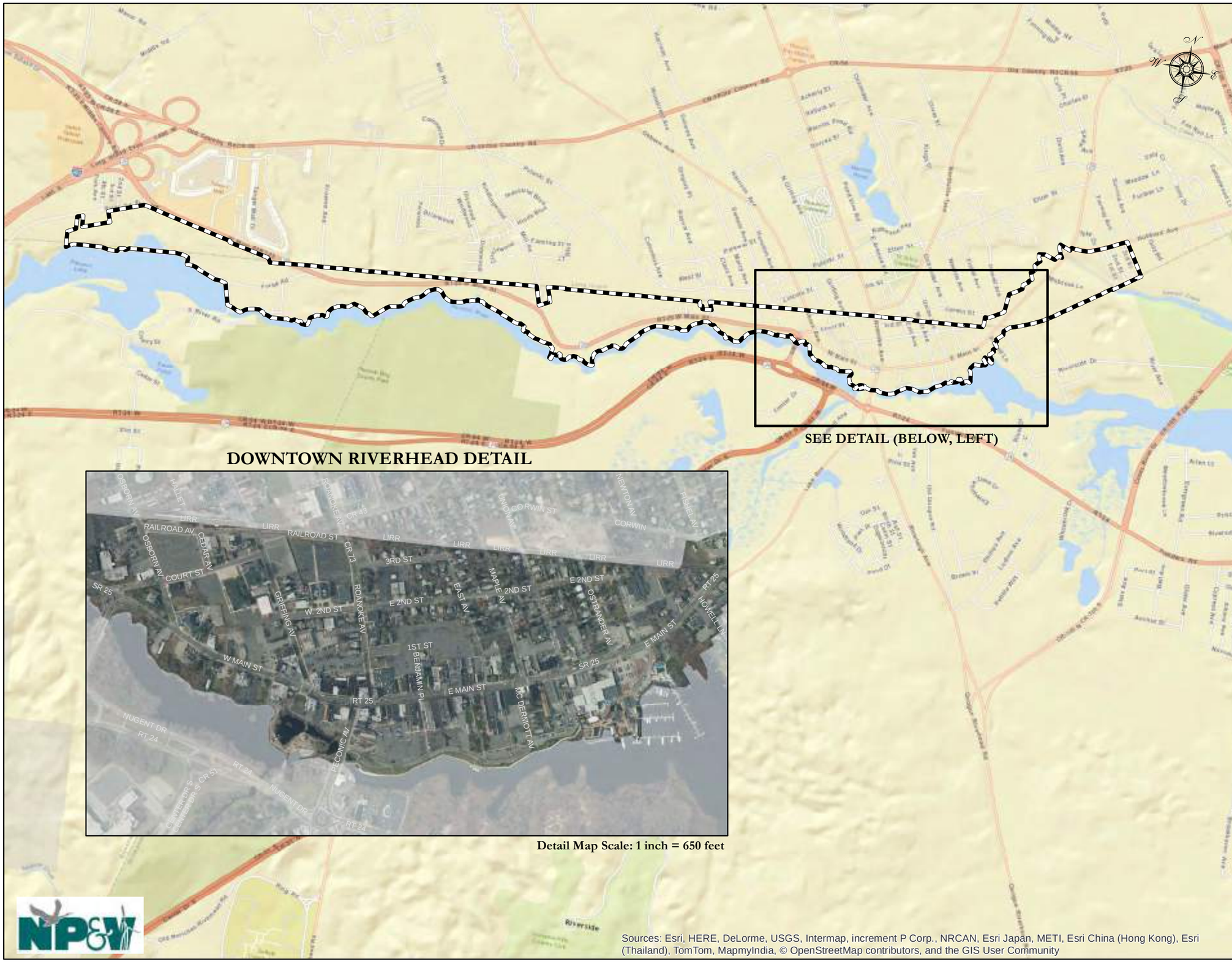
There are significant assets located within and surrounding the Brownfield Opportunity Area. These assets include but are not limited to the Peconic River (which is a NYS Wild, Scenic & Recreational River Corridor), a multimodal regional transportation network, a successful retail outlet market, a historic downtown with an active riverfront park and numerous other attractions (including the Long Island Aquarium, theaters, restaurants, and shopping), and residential neighborhoods. Although Downtown Riverhead has seen new vibrancy in recent years, there are still obstacles that the downtown and its gateways confront. The following provides a list of the unique challenges the community faces within the Study Area:

- a high rate of commercial vacancies and abandoned properties;
- nonconforming uses and incompatible land use patterns;
- traffic congestion in the downtown related in part to an offset intersection in the center of town;
- need for improved pedestrian environment;
- parking issues;
- Peconic River/Estuary water quality;
- localized flooding during storm events;
- need for wayfinding signage at gateways and in the downtown area;
- the need to overcome a negative image with a rebranding effort; and
- strict DEC imposed restrictions on redevelopment related to a designated river corridor which essentially institutionalizes the preexisting nonconforming uses.

Town of Riverhead
Peconic River/Rt. 25 Corridor

NYS BOA Step II Nomination

BOA Boundary Map



Detail Map Scale: 1 inch = 650 feet

Sources: Esri, HERE, DeLorme, USGS, Intermap, increment P Corp., NRCAN, Esri Japan, METI, Esri China (Hong Kong), Esri (Thailand), TomTom, MapmyIndia, © OpenStreetMap contributors, and the GIS User Community

Legend

BOA Study Area

Sources: ESRI WMS,
NYSGIS Clearinghouse,
Town of Riverhead

1 inch = 2,000 feet

0 2,000 4,000 Feet

Public Participation Process

The outreach effort for the development of this BOA Nomination was comprised of a variety of community participation activities and employed many strategies to draw input from a broad range of stakeholders, as well as potential project partners. **Section 2.0** of this Nomination describes the community outreach techniques and events, as well as how the input shaped the vision and recommendations of this Step II BOA Nomination. The main goals of community participation for this project were to arrive at the community's vision for the Study Area, understand the barriers to redevelopment of underutilized properties and receive input on concepts and action strategies to achieve that vision. The BOA program has enabled the Town and stakeholders to establish a Vision Statement provided below which seeks to continue to revitalize and improve areas impacted by brownfields, abandoned, and underutilized properties so they become economically and environmentally sustainable.

The Vision for the BOA Study Area recognizes the significance of Downtown Riverhead as the historic, cultural, and governmental center serving the Town, and the Town seeks to promote its continued evolution as a unique, regional destination that showcases the Peconic River as the scenic and recreational blueway which links the many cultural, historic, and entertainment opportunities along the waterfront.

The Vision for Downtown Riverhead is to continuously improve and create a successful and thriving historic downtown. The downtown encourages sustainable building and green infrastructure to promote a healthy environment for all that live and work there, and all that seek to enjoy the many attractions in the area. The downtown provides a compact development of mixed uses that provide a safe, inviting, and enlivened atmosphere featuring thriving local businesses, an active arts community, housing choices where residents can live in and near the downtown, restaurants offering locally sourced products, riverfront recreational activities, and events that appeal to residents and attract visitors.

Downtown Riverhead should continue to utilize its location in the East End of Long Island and access to the various local vineyards and farms to promote an expansion of the current agritourism industry. The downtown will continue to be enhanced as an arts destination with programming to attract visitors to the downtown throughout the year.

The gateways to the downtown provide a mix of land uses and a streetscape that is aesthetically pleasing and accessible for safe transport of motorists, bicyclists and pedestrians. Uses which complement the Downtown and are attractive to visitors will be promoted along the gateway corridor, and will serve to draw visitors to the downtown. The vision for the West Main Street gateway area is to provide a low density rural environment that encompasses a conservation easement along the river to allow for a continuous public river walk. This area also includes a new focal point in the vicinity of Mill Road where redevelopment will be encouraged to create a mix of visitor focused attractions including restaurants, lodging and river oriented uses to complement the similar amenities and boat landing that exist in the area today.

Community's Vision for the Area and Major Goals and Objectives

Although there are numerous significant assets within Riverhead, there are numerous abandoned properties as well as underutilized sites which have not achieved their highest and best use due at

least in part to the multitude of obstacles that are explored in this Nomination Study. One of the main goals of the Town of Riverhead Peconic River/Route 25 Corridor Brownfield Opportunity Area Nomination is essentially to overcome several major obstacles to redevelopment and revitalization and to identify key strategic sites/areas where redevelopment (or preservation and related improvements) will act as catalysts for revitalization of the area as a whole.

The following describes the major goals and objectives that have been expressed by the community in order for it to achieve its vision for the Town of Riverhead Peconic River/Route 25 Corridor Brownfield Opportunity Study Area. One of the primary goals that has been expressed throughout the community participation process is for the BOA Study Area to be revitalized in a way that captures a greater share of the visitors who come to the community to create a critical mass of economic activity. Community revitalization objectives to achieve this overarching goal include:

- revitalization of downtown Riverhead by attracting development that emphasizes and accommodates agritourism and ecotourism activities and uses;
- rebranding downtown Riverhead to assist in attracting new visitors and create a cohesive identity for the community;
- improving the gateways to the downtown and enhance opportunities for redevelopment in the gateway areas;
- enhancing the buildings, streetscape, and uses along Main Street and the Arts and Historic Districts;
- making downtown pedestrian friendly;
- planning for transportation improvements which accommodate growth;
- providing unique cultural attractions; and
- improving Peconic River access and expanding the range of available recreational opportunities.

Inventory and Analysis and Key Recommendations

Section 3.0 of this Nomination Study provides an inventory and analysis which resulted in a comprehensive understanding of conditions and resources as they relate to specific issues, constraints, and redevelopment opportunities. **Section 4.0** documents the key findings and recommendations and includes an identification of the key strategic sites and areas that present the best opportunities for redevelopment. A summary of the inventory and analysis as well as related key findings and recommendations are provided in the following sections.

- **Land Use, Zoning and Wild, Scenic, and Recreational Rivers Designation:**
  A large portion of the western and a smaller portion the central subareas of the BOA are within the boundary of the NYSDEC-designated Peconic River Recreational River corridor (refer to **Figure 3-3**). The existing stringent regulations on development have been identified as a major obstacle to redevelopment within these portions of the BOA Study Area. "Community" designation (which is also protective of the river in appropriately applied areas) would allow limited industrial/institutional/commercial development and is more in keeping with existing land use and goals for the area as expressed in this BOA Study. An analysis of the WSRR revealed

that there is potential for a new community designation which, if approved by the DEC, would apply to a total of 51 parcels within the Study Area.

The inventory and analysis of land use and zoning within the Study Area has been divided into four subareas illustrated on **Figure 1-4**. The following provides a summary of the existing land uses and recommendations.

The western subarea is largely rural in character and includes a mix of land uses including residential homes (including a mobile home community), vacant properties, a recreational use, open space, and a variety of commercial and light industrial uses fronting on West Main Street. This subarea contains an abandoned duck farm property with deteriorated structures and is highly visible on the corridor. The mobile home community does not conform to current zoning or current sanitary code standards. Within the western subarea there are two sites which provide opportunities for transient lodging (B&B, small inn, or campgrounds). One site is the former duck farm noted above which is located on the south side of West Main Street opposite Kroemer Avenue. Another potential transient lodging site is on the former Olin Duck Farm on River Road. The 84 Lumber site provides a gateway opportunity, which could provide a location for a visitor center with related services.

The central subarea contains a mix of commercial uses including restaurants, car repair shops, retail, and service businesses. The eastern portion of the subarea is considered a gateway into downtown Riverhead and contains a mix of residential uses, auto related uses, a gallery, sign shop and riverfront restaurant. There appear to be nonconforming uses in this subarea, including the residential uses along Sweezy Ave in the Ind-C district and pre-existing commercial uses in the RFC district, including a cluster of sites on the river near Mill Road which are developed with commercial (generally automotive related) uses. These sites were included in the recommended WSRR "Community" area which will encourage redevelopment of this area with more compatible uses in conjunction with river oriented commercial activity and tourist interests. Towards the eastern portion of this subarea, a positive transformation has begun in recent years which includes the revitalization of a former commercial property on the river which is now a gallery/architect's office. Another example is the reuse of existing structures on the south side of West Main and creation of a restaurant which provides outdoor seating on the Peconic River. These types of uses are appropriate for this transitional area leading into the downtown and should continue to be encouraged as they act as catalysts for redevelopment in the surrounding area. But it is also that case that there are numerous structures that have been boarded up for over 5 years and continue to deteriorate. In the absence of creative planning solutions, properties are likely to continue to remain vacant eyesores along the riverfront. Providing incentives or appropriate relief to property owners within this portion of the corridor will encourage reuse and revitalization of these properties.

The downtown subarea contains a mix of cultural, commercial, office, and institutional uses. An inventory of vacant buildings was conducted in 2015 for buildings on Main Street throughout the Study Area and on the streets surrounding the Riverhead LIRR Train Station (Court Street, Griffing Avenue, Railroad Avenue, Cedar Street, and Roanoke Avenue) in the downtown subarea. A large portion of the downtown is zoned DC-1. The DC-1 regulations are very flexible and favorable to advancing redevelopment. A full build-out development analysis for the DC-1 District was conducted as part of this Nomination to test for consistency with the planning goals of the Town for the downtown area; and to evaluate alternative code provisions to determine if a change in the code provisions would be more consistent with Town goals. The results of the full build-out development analysis indicated the potential for over 1.8 million additional SF in the DC-1 district. Alternative development scenarios were also conducted with reduced bulk

requirements developed. Finally the analysis contains an evaluation of a possible Transfer of Development Rights (TDR) Program which if implemented by the Town could result in the preservation of properties along West Main Street, with increased density within the downtown area and train station block. This would provide benefits with respect to the environment (in transferring development to an area with sewer infrastructure), increase number of residential units with access to transit and walkable to amenities and implementation of the greenbelt vision for the south side of West Main Street (as well as increased public access and views of the Peconic River). The recommendations which evolved include reduced bulk requirements for the DC-1 District, including a reduced Floor Area Ratio. However, it is also recommended that the full FAR of the current DC-1 District code be achievable through transfer of development rights, sustainable design and community benefits. The downtown subarea contained the majority of vacant buildings identified in the inventory (24 out of a total of 33). This was compared to a Town inventory of vacancies performed in 2010 and it was observed that many of the buildings that were vacant in 2010 but occupied in 2015 are located on Main Street between Roanoke Avenue and East Avenue. This highlights the recent successes that are occurring in downtown Riverhead, particularly along East Main Street. In addition, until recently, there were few apartment units in the downtown; a necessary ingredient for a successful downtown. Since this study began, two successful mixed use buildings containing apartments have been constructed and are now occupied. The residents of these buildings now frequent the area businesses, enjoy the convenience of living in a walkable area and help to create 24 hour activity in town.

In the eastern subarea, most of the land use appears to be consistent with zoning; however there are a few examples of incompatible uses. The existing Gershow auto salvage yard along the south side of Hubbard Avenue is located within the Commercial/Residential Campus zoning district, and is inconsistent with the zoning regulations of this district. From a land use compatibility perspective, this use is also considered to be incompatible as it is located adjacent to residential homes and Sawmill Creek, which is a tributary to the Peconic Estuary. The towing business to the west of Gershow could be included in a redevelopment plan for multifamily use. The site was rezoned for Commercial/Residential Campus as recommended by the Comprehensive Plan in 2003; however, incentives for redevelopment may be appropriate. There is also an opportunity for redevelopment in the future of an existing automotive use situated on the north side of East Main Street, just west of the intersection of Hubbard Avenue. This property adjoins a small pond and would provide an attractive gateway feature and public amenity in an area where there are few recreational resources if acquired and redeveloped as a gateway park.

- **Historic Resources**: The Town is progressive in its protection of historic resources. Downtown Riverhead is home to numerous historic districts and structures, some of which are recognized at the local, State and Federal levels. The largest town designated historic district is the Town Historic District which includes the Nationally Registered Riverhead Main Street Historic District. Additionally, there are National Register listed properties within the Study Area including the former United States Post Office, Suffolk County Historical Society Building and Second Street Firehouse. Finally, there are two Town designated historic districts that may be eligible for inclusion on the National Register within or near the BOA Study Area: the Upper Griffing-Roanoke Avenue District and the 2nd Street District. During the course of the Study, NP&V and affiliated firm HWJ prepared an inventory and analysis of historic structures on behalf of the Town Landmarks Preservation Committee to include in their application to the State Office of Historic Preservation for the 2nd Street area.

- **Transportation**: As a component element of this BOA Study, a Transit Oriented Development (TOD) Growth Plan was prepared to evaluate existing and predict future traffic growth within the

Study Area; the congested roadways and delays at area intersections are increasingly becoming a significant problem in Riverhead that are believed to be a hindrance to attracting new development. The TOD Growth Plan also considered the role of public transportation, opportunities to further enhance pedestrian and bicycle safety and an evaluation of existing parking and future parking needs. The TOD Growth Plan was prepared by Nelson & Pope and is provided as a separate report. A summary of the inventory is provided in **Section 3.2.7** and transportation related recommendations are provided in **Section 4.3**. Key recommendations related to vehicular flow revolved around the offset intersection of Main Street and Peconic Avenue/Roanoke Avenue in downtown Riverhead. The analysis finds that as the existing vacant shops are filled and normal growth factors are applied, that mitigation at this intersection is needed. Two mitigation recommendations were evaluated, one, to restrict traffic on Peconic Avenue to one-way northbound, which would require evaluation and modification of the intersection to the west of downtown which would receive the majority of southbound traffic and the second, to create a T intersection, which would require acquisition of developed properties on the north side of West Main Street.

Parking demand is expected to increase as new development occurs and there are several recommendations related to maximizing use of existing parking, increasing parking requirements and consideration for structured parking.

The area west of the downtown contains wide shoulders therefore the addition of bicycle lanes should be considered as this could encourage residents in the western portion of the Study Area to use bicycles as a way to travel throughout the area. There are several bicycle signs along several roads in the downtown, but there is a need to develop uniform bicycle signage in order to convey clearly the locations of bicycle routes. As part of the BOA recommendations for augmenting the on-street bicycle routes with bike paths on public property and on private lands were developed where redevelopment could incorporate conservation easements in the future.

- **Infrastructure**: The Study Area is well served by existing infrastructure, including a Sewer District that serves a portion of the Study Area. For those portions of the Study Area that are not connected to the sewer district there are several properties that have been identified as high priorities for connection in order to reduce nitrogen loading entering the surrounding waterways due to a shallow depth to groundwater on these sites.

- **Natural Resources and Environmental Features**: Natural resources and open space can provide a benefit to redevelopment of BOA sites as these spaces are attractive to residents, businesses and tourists. An analysis of sensitive species was conducted because the presence of a rare, threatened, or endangered species could limit the redevelopment potential of a site. Additional analyses were conducted to analyze the current conditions and possible effects of redevelopment on groundwater, surface waters, flooding, and wetlands.

- **Water Resources**: The water quality in the Peconic River and Peconic Estuary is impacted by surrounding land uses and other point sources of pollution. The Peconic Estuary and portions of the Peconic River are identified on the New York State 303(d) list as impaired due to high levels of nitrogen and high levels of pathogens. Local data indicate the average nitrogen levels have reached as high as 19.37 mg/l (as compared to the Peconic Estuary Program's recommended limit of 0.45 mg/l). Shellfish closures exist in the area of the Peconic Estuary east of Peconic Avenue. This area, designated as part of the Flanders Bay shellfish area, is permanently closed due to high levels of fecal coliform detected in the water. The BOA Nomination presents many recommendations that if implemented would lead to water quality improvements in the river and

bay including expansions to the Sewer District to existing uses and for beneficial redevelopment projects. Specifically, it is recommended that extension of the sewer district be considered in two areas: the Forge Road Mobile Homes and west of Raynor Avenue to Mill Road. In addition, stormwater runoff is recognized as a potentially major conveyor of pollutants to the Peconic River, at times delivering high levels of nutrients, pathogens, heavy metals, and hydrocarbons to surface water without any opportunity for attenuation. The BOA program presents excellent opportunities to advance Peconic water quality protection goals through the implementation of green infrastructure practices and the BOA Study Area was reviewed for potential green infrastructure opportunities and specific green infrastructure plans were developed for the Riverfront Park, former Fire Station, LIRR Station Parking, and the Peconic River Mobile Homes.

- **Recreational Resources**: There are a significant number of parks and open space areas within the BOA boundary and within the surrounding area. However, increased access to areas along the river is desirable. Specific recommendations include working towards a continuous greenway along the river, expanding visual access to the river, creating a conservation easement along the river for public access, creating a pedestrian bridge, and developing a blueway trail.

- **Placemaking:** Placemaking is nothing new in the realm of planning - it is actually a term that originated in the 1960s that centers on well-being - quality of life, health, happiness, and creating places of beauty, safety, comfort and an environment where people can share positive experiences in public spaces. One can point to the relatively recent success stories which are at the root of Riverhead's renaissance - the Long Island Aquarium, the Hyatt, East Ends Arts gallery and school, Suffolk Community College Culinary Arts, the reopening of the Suffolk Theater and numerous new shops, unique restaurants, and craft breweries. The Town of Riverhead's commitment to the importance of placemaking and community events is evident in its interest in bringing WaterFire to Riverhead; and towards this end the Town Board authorized the expenditure of BOA funds for the preparation of a Creative Placemaking Plan by Barnaby Evans, the creator of WaterFire, to draw upon his experience for hosting large community events in downtown Riverhead.

- **Marketing**: Overcoming obstacles to redevelopment/revitalization is the main theme of the BOA program, and it is believed that a strong brand will be an important first step in marketing for the Riverhead downtown and gateway areas that encompass the BOA Study Area. During the course of this study, the Town of Riverhead selected a local marketing firm, Graphic Image Group, to develop a marketing approach, which includes a logo and website, www.welcometoriverhead.org that will be used by the Town of Riverhead to promote redevelopment, increase visitor potential, and promote programs in the downtown and surrounding areas.

- **Opportunities Based in Part on the Economic and Market Trends Analysis**: An Economic and Market Trends Analysis identifies new opportunities for vacant and underutilized properties. Despite the strengths – both within the Study Area and in the immediate surroundings – the downtown has failed to fully capitalize on its assets. An abundance of vacant storefronts and underutilized properties exist in the downtown and nearby, and stores are struggling to compete with the nearby "big-box" retail corridor. The analysis makes recommendations for the most sustainable uses for the downtown, as well as uses that may be better suited to areas outside of the

downtown. The analysis found that while much of the demand for goods and services is satisfied by the retailers along Route 58, there are several business segments where demand is quite strong, as reflected in significant gaps between consumer spending and sales – extending beyond the primary market area, and into the secondary market area as well. These gaps indicate success potential, with demand that is likely large enough to support additional establishments within the target market area. Industries in both the primary and secondary market that exhibit a retail gap include:

- Auto parts, accessories and tire stores;
- Furniture stores;
- Specialty food stores (including meat markets, fish and seafood markets, fruit and vegetable markets, bakeries and/or candy stores)
- Book, periodic and music stores;
- Other general merchandise stores (including warehouse clubs and supercenters);
- Florists;
- Full-service restaurants (or sit-down restaurants where patrons generally order and are served by wait staff); and,
- Special food services (including food service contractors, caterers and mobile food services).

Community input supplemented the data and indicated the need for additional places to eat and socialize (coffee shops, micro-breweries, other venues to hear live music), the desire to attract a grocery store to the downtown, and unique shops. There is a retail gap in entertainment related uses, and such uses are in keeping with the community vision to attract visitors to the downtown.

Strategic Sites and Associated Redevelopment Opportunities

Properties that were identified as potential brownfield sites were further investigated during the course of this project. Of these sites, eight sites/groups of sites are considered strategic redevelopment sites, in that these properties are located in areas where redevelopment would be expected to act as a catalyst for redevelopment and revitalization of the surrounding areas as well. Through an analysis of land use, zoning, WSRR regulations, field investigations, community input, and a Toxics Targeting database report, NP&V identified potential brownfields, vacant and underutilized properties.

RECOMMENDED BOA STRATEGIC SITES

Strategic Site #	Address	Land Use
1	1863 West Main Street	Auto Repair
2	1751 West Main Street	Former 84 Lumber - currently vacant
3	1581 West Main Street	Former Bridge View Duck Farm
4	1175, 1161, 1167, 1153-1159, 1165, and 1141 West Main Street	The existing land uses include three (3) single family residential homes, an existing fish market and restaurant, office, contractor yard/ outdoor storage areas, and auto repair shop
5	Railroad Avenue between Griffing and Osborn Avenue	Train Station Block (parking and mix of private uses in eastern block including takeout food service, office, residences, vacant restaurant)
6	944 East Main Street	Gas Station
7	965 East Main Street	Auto Towing
8	27 Hubbard Avenue	Gershow Recycling

Below are specific issues and opportunities identified for each of the strategic sites and possible redevelopment options.

- **Strategic Site 1:** This site was selected as strategic due to its prior and current land use as an automotive service facility and its prominence as a gateway to the Study Area and downtown. Currently the site is classified as "Recreational" under the DEC WSRR and it is recommended that the site is reclassified as "Community." If the DEC approves the change in designation, conforming commercial use is recommended and will be feasible.

- **Strategic Site 2:** This former lumber yard site is a relatively large parcel (approximately 5.5 acres in size), highly visible, located adjacent to an existing rail spur and is in close proximity to the Tanger Outlet Center. These factors present a great opportunity for future redevelopment as a visitor center with a food court or possible multiplex.

- **Strategic Site 3:** This highly visible site on West Main Street is now overgrown and contains an abandoned deteriorating building visible from the roadway. It is noted that residual waste products from the prior duck farm use could remain on the site and if present would need to be removed prior to redevelopment. Input from DEC Region 1 was obtained regarding the potential for river oriented lodging and it was indicated that such use is compatible with the regulations.

- **Strategic Site 4:** The intersection of W. Main Street and Mill Street includes certain non-conforming uses including auto repair establishments and outdoor storage/ contractor yard. The subject site is included in the proposal for a WSRR change to the "community" designation[1] which would open new opportunities for redevelopment of this area. This location is envisioned as a gateway to Downtown Riverhead and provides opportunities to be developed collectively as "Peconic Overlook" as illustrated in the conceptual sketch to the right. The concept plan shows 9,600 SF of mixed retail and a café, an 8,000 SF Bed & Breakfast, a parking lot providing 40 parking spaces surrounding the existing Buoy One fish market and restaurant, a boat/canoe launch, a river walk, and open space with seating areas and picnic tables, and a stormwater management plan designed on the principles of green infrastructure.

[1] WSRR change in designation from "recreation" class to "community" class is proposed for fifty-one (51) parcels is provided in **Appendix B.**

- **Strategic Site 5:** This site has tremendous opportunity due to its proximity to the train station and downtown Riverhead. This Strategic Site is also within the Railroad Street Urban Renewal Area. Redevelopment of this area to include coordinated mixed-use development is envisioned and illustrated on the sketch to the right.

  The concept sketch illustrates a four story building in the eastern portion of the block providing approximately 30,000 SF of commercial space on the ground level, approximately 35,000 SF on each of the upper levels and a parking garage in the western portion of the block.

- **Strategic Site 6:** The parcel is approximately 0.22 acre in size and is zoned RA40 (Residential) but is developed with an auto repair business, a nonconforming use. It is recommended that the Town consider acquisition of this site for the purpose of providing a gateway park.

- **Strategic Sites 7 and 8:** This site consists of two separate tax parcels: an auto towing business and a recycling facility. To encourage the redevelopment of the properties with a compatible use, it is recommended that the provisions of the CRC District be revisited to consider increasing the allowable residential density.

1.0 DESCRIPTION OF THE PROPOSED PROJECT AND BOUNDARY

1.1 Lead Project Sponsors

On April 20, 2011, the NYS Department of State announced that the Town of Riverhead had been awarded a grant through the New York State Department of State (NYSDOS) for the preparation of a Brownfield Opportunity Area (BOA) Step II Nomination Study. On May 24, 2012, the Town of Riverhead Town Board (Town Board) issued a Request for Proposals and on February 5, 2013 the Town Board resolved to authorize the Supervisor to sign a contract with Nelson, Pope & Voorhis, LLC (NP&V) to prepare the BOA Step II Nomination Study.

A BOA Step II Nomination Study is generally intended to:

- Identify and describe the reuse, development opportunities, and needs in the proposed BOA with an emphasis on the identification, description, and recommendations for preliminary reuse opportunities for identified brownfield sites and other actions to revitalize the area.
- Include a description of anticipated end land uses including residential, commercial, industrial, or recreational and describe the anticipated future conditions and use of groundwater.
- Identify and describe any other public and private measures needed to stimulate investment, promote revitalization and enhance community health and environmental conditions in the proposed BOA.[2]

Under the work program for the Town of Riverhead, the scope of work was refined to meet the specific needs of the community related to:

- Preparation of a detailed demographic analysis for the market areas to provide information to potential developers regarding the unique customer base in the primary and secondary target market areas.
- Preparation of an economic and market trends analysis to justify a range of realistic future land uses for the Study Area - utilizing and building upon data and analysis from the demographic analysis.
- Identification and evaluation of future redevelopment scenarios
- Preparation of a TOD Growth Plan to evaluate traffic flow and limitations the current roadways present, the opportunities presented by public transit, parking utilization and planning and a pedestrian and bicycling plan.
- An area-wide environmental assessment to identify properties with documented environmental contamination within the study area.
- Provide a marketing strategy for rebranding Riverhead and website landing page that can be built upon as Riverhead continues to change and revitalize.

As the study progressed, three additional elements were added to the work program based upon input received from the community and Town:

[2] NYSDOS, NYSDEC Brownfield Opportunities Area Program, Guidance for Applicants, October 2008.

- An application to the NYSDEC for designation of a portion of the WSRR recreational corridor to the community designation to allow for more flexibility in land use. The task involved identifying parcels to meet the strict criteria of the DEC for such designation, preparation of supporting narrative and maps, meetings with the Regional DEC office and coordination with DEC headquarters, and assistance to the Town in making application to the DEC. An application was prepared by NP&V and in coordination with the Town, submitted to the DEC in October 2014. The application remains under review in DEC Headquarters in Albany.
- Assistance to the Town Land Preservation Commission, preparation of a comprehensive inventory of structures along 2nd Street and in the vicinity and organization for submission to the State Historic Preservation Office and coordination between SHPO and LPC. The inventory was completed by NP&V's affiliate, Hawkins Webb & Jaeger in spring of 2015 and the LPC is utilizing the materials to complete the application to SHPO.
- Preparation of a Creative Placemaking Plan by WaterFire International to provide insight into making Riverhead conducive to hosting large scale placemaking events with a possible WaterFire event in the future. This document is in draft form as of the date of finalizing this Nomination Study and is intended to be a stand-alone product to be finalized by June 2016.

The lead project sponsor is the Town of Riverhead with guidance and funding provided by the New York State Department of State (DOS) through its BOA grant program. The Town of Riverhead Community Development Agency is the agency overseeing the project and the Town Board and DOS are responsible for final review and approval. A Steering Committee was created, which includes among its members two Town Board members as well as the Director of the Town of Riverhead Community Development Agency, and acted as liaisons between the Project Team/Steering Committee and the Town Board. Participants in the development of the BOA Step II Study are identified in **Section 2.0** of this Study.

The primary purpose of the New York State BOA Program is to conduct an area-wide and community-supported planning process for brownfield redevelopment. A "brownfield" or "brownfield site" as per 6 NYCRR Part 375 means any real property where a contaminant is present at levels exceeding the soil cleanup objectives or other health-based or environmental standards, criteria or guidance adopted by the Department that are applicable based on the reasonably anticipated use of the property, in accordance with applicable regulations. The BOA program enables the Town and stakeholders to establish a clear vision to revitalize and improve areas with brownfields so they become economically and environmentally sustainable.

While many planning efforts have been initiated previously by the Town of Riverhead for the Riverhead downtown, which is encompasses with the BOA Study Area, only portions of these plans have been implemented - and none have achieved the desired level of momentum required to achieve revitalization of the downtown and gateway areas.

1.2 Project Overview and Description

The purpose of the Town of Riverhead Peconic River/Route 25 Corridor Brownfield Opportunity Area project is to overcome several major obstacles to redevelopment and to identify key strategic sites/areas where redevelopment (or preservation and related improvements) will act as catalysts for revitalization of the area as a whole.

The Town of Riverhead is situated along the northeasterly end of Long Island in Suffolk County, New York. The 201.3 square mile Town extends from the middle of Long Island Sound to the north, to the Peconic River and Flanders Bay to the south. Riverhead adjoins: the Town of Brookhaven to the west, the Town of Southampton to the south, and the Town of Southold to the east. The Community Context Map (**Figure 1-1**) shows the location of the Town of Riverhead Peconic River/Route 25 Corridor BOA Study Area and its relationship to the greater Riverhead community and surrounding region. It is located centrally along the Town's southerly border with the Town of Southampton.

The Study Area Context Map (**Figure 1-2**) provides a generalized view of the Study Area's relationship with its environs. The Study Area is a linear corridor along West and East Main Street north of the Peconic River extending from the easterly terminus of I-495, known as the Long Island Expressway, through downtown Riverhead and continuing to include a portion of Hubbard Avenue to the east of the downtown. The Study Area is located advantageously where Long Island splits into the North and South Forks. New York State Route 25, which travels through the Study Area, is a major arterial roadways providing access to communities along the North Fork. Development within the Town and region, including within the Study Area, has been influenced by the presence of post-World War II complexes on Long Island, including the former Naval Weapons Industrial Reserve Plant in nearby Calverton, now the site of EPCAL. The plant operated from 1956 until 1996, and encompassed approximately 6,000 acres along NYS Route 25. The Study Area is also served by the Long Island Rail Road's Main Line, and includes the Riverhead train station.

Figure 1-3 provides a map of the proposed BOA Boundary and Study Area which is generally described as being located:

- east of the I-495 Interchange 72 which ends at NYS Route 25 and parcels with frontage on the north side of the Long Island Rail Road along River Road[3] to a distance of approximately 1,500 feet west of Route 25; and
- north of the Peconic River;
- south of NYS Route 25 at its westerly end, until the road intersects with the Long Island Rail Road Main Line, where it follows the rail right-of-way through the Riverhead downtown. The boundary continues east where it follows the rear property lines of lots within frontage on East Main Street, and then includes properties on the south side of Hubbard Avenue for a distance of approximately 1,200 feet; and,
- Approximately 200 feet west of the southerly terminus of Sunrise Avenue on Hubbard Avenue.

[3] Not including two parcels which front on River Road which are not adjacent to the LIRR tracks.

Town of Riverhead
Peconic River/Rt. 25 Corridor

NYS BOA Step II Nomination

FIGURE 1

Community Context Map

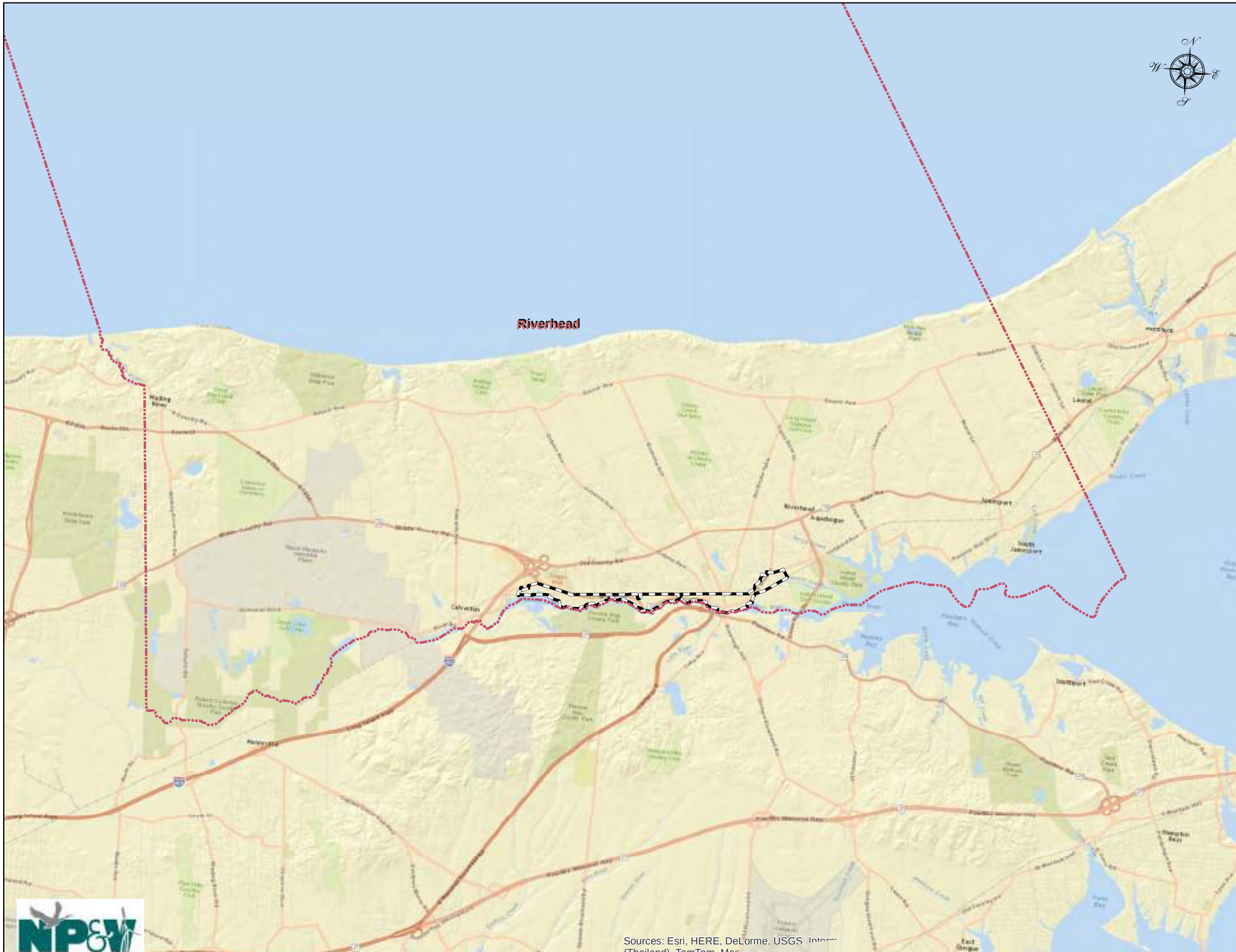
Legend

- BOA Boundary
- County Boundary
- Town Boundary

Sources: ESRI WMS; NYSGIS Clearinghouse

1 inch = 5 miles

0 5 10 Miles



Town of Riverhead
Peconic River/Rt. 25 Corridor

NYS BOA Step II Nomination

FIGURE 1-2
Study Area Context Map

Legend

Town of Riverhead

BOA Study Area

Sources: ESRI WMS, NYSGIS Clearinghouse

1 inch = 8,000 feet

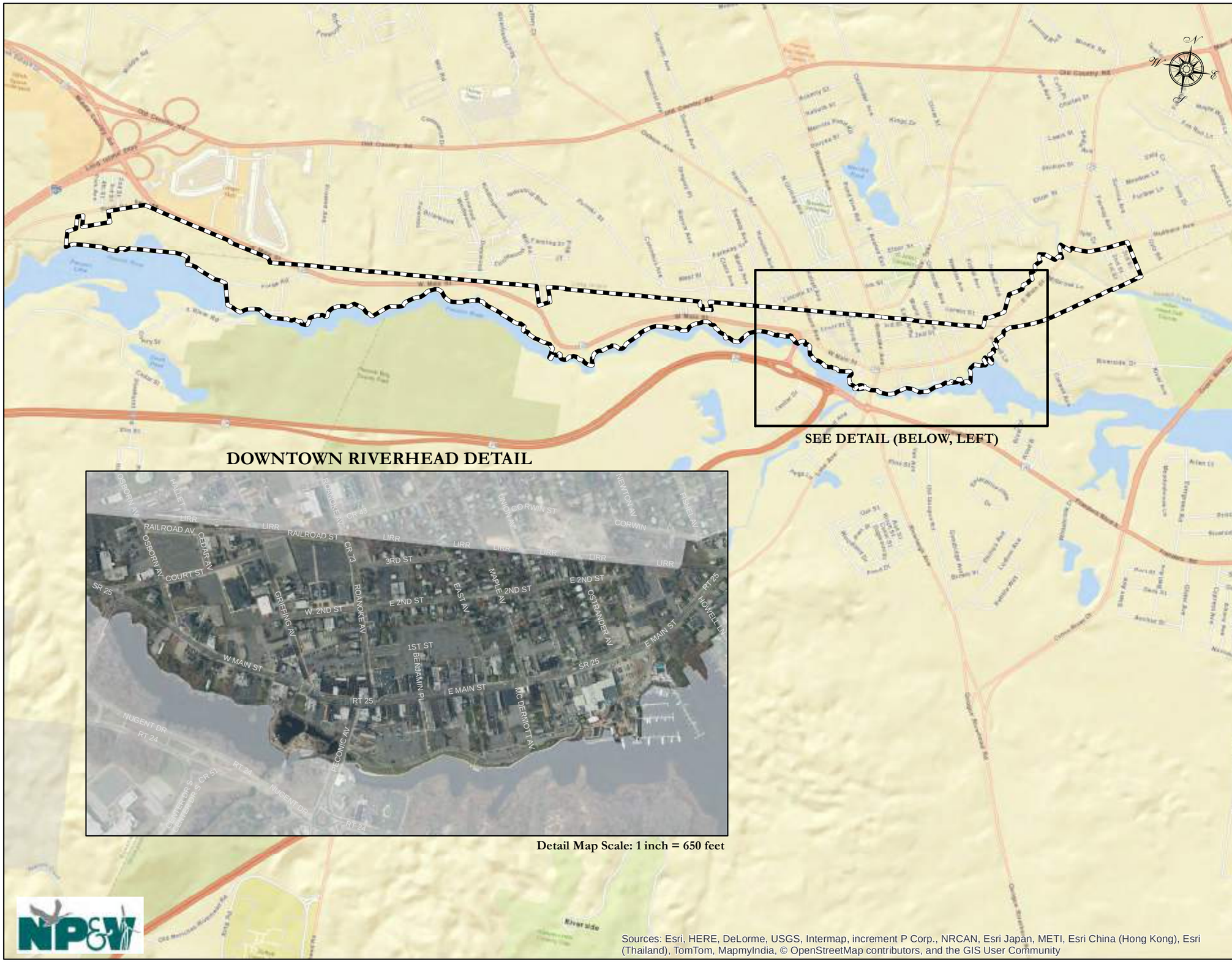
0 8,000 16,000 Feet

Town of Riverhead
Peconic River/Rt. 25 Corridor

NYS BOA Step II Nomination

FIGURE 1-3

BOA Boundary Map



Detail Map Scale: 1 inch = 650 feet

Legend

BOA Study Area

Sources: ESRI WMS, NYSGIS Clearinghouse, Town of Riverhead

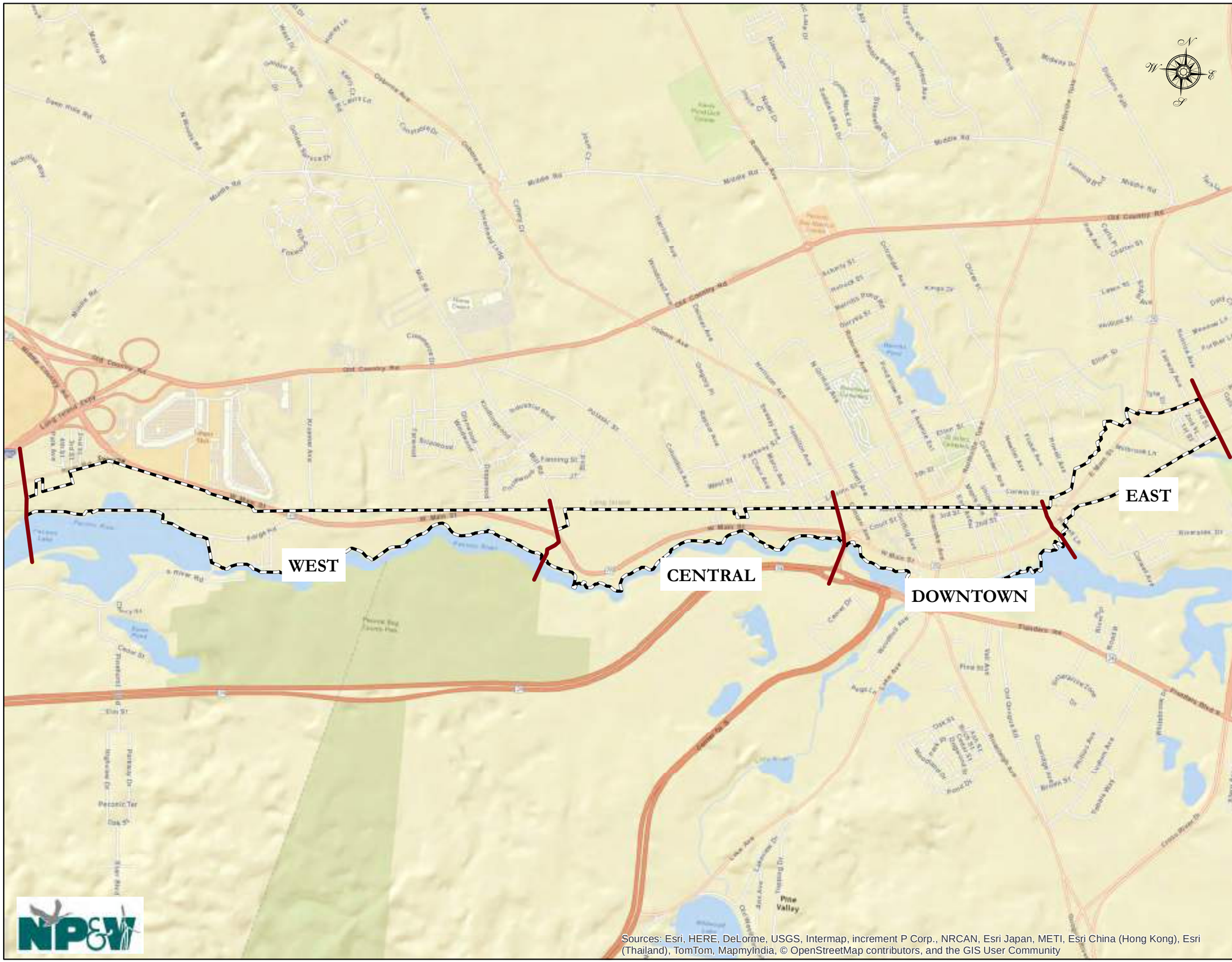
1 inch = 2,000 feet

0 2,000 4,000 Feet

Sources: Esri, HERE, DeLorme, USGS, Intermap, increment P Corp., NRCAN, Esri Japan, METI, Esri China (Hong Kong), Esri (Thailand), TomTom, MapmyIndia, © OpenStreetMap contributors, and the GIS User Community

The BOA Study Area is approximately 495 acres in size (about ¾ of a square mile) and stretches approximately 1.03 miles from west to east generally from the eastern end of the Long Island Expressway (LIE) east to Hubbard Avenue and also encompasses an area north of Main Street in downtown Riverhead. The Study Area includes downtown Riverhead, which is an older, traditional downtown which fronts on Main Street (with Peconic Avenue and Roanoke Avenue providing the delineating roadway for West Main Street and East Main Street). It is surrounded by adjacent traditional residential neighborhoods and the Peconic River where it adjoins the Study Area to the south. Approximately one-third of the Study Area encompasses the downtown and the easternmost portion of the Study Area, with two-thirds of the Study Area located to the west of downtown.

The Study Area contains 695 individual tax parcels including numerous potential BOA sites, including sites which may require remediation if proposed for redevelopment in the future. Sixty-six lots were identified collectively as priorities for water quality management (all are located on Forge Road in the mobile home park). Numerous lots have been identified as underutilized or considered important for their strategic location. These were analyzed for likely redevelopment scenarios and potential to act as catalysts for redevelopment of the surrounding areas. There are many underutilized or vacant sites within the Study Area which offer a variety of opportunities for: business development; job creation; property value and tax base enhancements; water quality improvements; public amenities and capital infrastructure projects; new housing choices; new cultural, open space, recreational, and tourism-based land uses; as well as critical environmental protection and restoration projects. The cleanup (where required), redevelopment and adaptive reuse of these sites would be a major step in promoting the revitalization of the Riverhead BOA and the fulfillment of a number of community goals and objectives. Because of the large size and diversity of the Study Area, it has been divided in to four subareas - western, central, downtown, eastern – for ease of discussion. These subareas are shown in **Figure 1-4**.



Town of Riverhead
Peconic River/Rt. 25 Corridor

NYS BOA Step II Nomination

FIGURE 1-4
BOA Sub-Areas

Legend

BOA Study Area

Sub Area Boundaries

Sources: ESRI WMS, NYSGIS Clearinghouse

1 inch = 1,800 feet

0 1,800 3,600 Feet

The recommendations of the BOA were developed based on extensive public input and are consistent with, and build upon applicable plans, studies, and laws, including but not limited to the 2008 East Main Street Urban Renewal Plan Update and Generic Environmental Impact Statement, the Town of Riverhead Comprehensive Plan, the Transit Oriented Design (TOD) Growth Plan (prepared by N&P as part of the BOA Nomination funding), the Peconic Estuary Program Comprehensive Conservation and Management Plan, the Town Code, and other applicable planning and land use regulatory documents.

The Riverhead BOA Study Area is partly within the Riverhead Census Designated Place (CDP), a U.S. Census Bureau statistical area.[4] In 2012, the Riverhead CDP was ranked as the 8th most economically distressed community of the 157 CDPs located in Suffolk County.[5] Economic distress indicators include data on poverty level, educational achievement, unemployment, median income and median housing values and percent of persons receiving public assistance.

The implications of having abandoned, vacant and underutilized properties within the community are expressed in the indicators of economic distress identified in **Table 1-1** which identifies the Riverhead CDP as the 8th most economically distressed community out of a total of 157 communities in Suffolk County.

TABLE 1-1
COMMUNITY ECONOMIC DISTRESS INDICATORS AND RANKS IN SUFFOLK COUNTY, 2008-2012

Incorporated Village or Census Designated Place	% With Public Assistance Income	Rank	% High School Graduates	Rank	% Below Poverty Level	Rank	Median Household Income	Rank	% Unemployed	Rank	Median Housing Value	Rank	Sum Of Ranks	Overall Rank
Riverside CDP	7.08%	5	93.34%	2	28.98%	3	$33,308	1	18.38%	2	$73,900	1	14	1
Gordon Heights CDP	8.07%	3	85.17%	20	22.18%	4	$56,457	12	14.40%	5	$201,000	7	53	2
Wyandanch CDP	11.70%	2	75.75%	8	35.88%	15	$53,848	8	9.93%	17	$279,100	5	57	3
Mastic Beach village	6.80%	7	84.58%	16	35.53%	11	$69,102	24	8.54%	25	$224,900	2	89	4
North Amityville CDP	4.93%	12	72.74%	6	32.32%	21	$61,514	14	10.00%	15	$319,506	17	85	5
Central Islip CDP	2.40%	27	71.86%	5	33.78%	19	$67,828	18	13.93%	8	$292,900	10	94	6
Brentwood CDP	4.52%	14	69.84%	3	3.95%	19	$68,924	23	10.04%	16	$307,500	12	103	7
Riverhead CDP	2.80%	23	85.04%	18	31.38%	23	$55,140	8	9.28%	21	$335,900	26	119	8
Bay Shore CDP	6.04%	9	84.77%	17	7.10%	13	$66,929	16	11.13%	11	$333,300	24	120	9
North Bay Shore CDP	7.62%	4	75.22%	8	6.14%	59	$71,051	26	10.15%	14	$313,200	14	124	10

Source: U. S. Census Bureau (2008-2012 American Community Survey)
Prepared by Suffolk County Planning, Peter Lambert, 12/27/13

1.2.1 Previous Planning Studies

A number of planning studies have been prepared over the past several decades that encompass all or portions of the Study Area. These include but are not limited to:

[4] A **Census Designated Place (CDP)** is the statistical counterpart of an incorporated place, and is delineated to provide data for settled concentrations of population that are identifiable by name but are not legally incorporated under the laws of the state in which they are located. The boundaries usually are defined in cooperation with local or tribal officials and generally updated prior to each decennial census. These boundaries, which usually coincide with visible features or the boundary of an adjacent incorporated place or another legal entity boundary, have no legal status, nor do these places have officials elected to serve traditional municipal functions.
[5] Suffolk County Planning Economic Distress Indicators for 2008-2012.

- Town of Riverhead East Main Street Urban Renewal Plan: October 1993, prepared by Town of Riverhead Community Development Agency (CDA);
- A Vision Plan for Downtown Riverhead: June 1995, prepared by Gary Jacquemin A.I.A.;
- The Town of Riverhead Railroad Street Urban Renewal Plan: Adopted by the Town of Riverhead Town Board in April, 1997;
- Revitalization Strategy for Downtown Riverhead: August 2000, prepared by Abeles Phillips Preiss & Shapiro, Inc.;
- Town of Riverhead Comprehensive Plan: November 2003, prepared by the Town of Riverhead Planning Board; Abeles Phillips Preiss & Shapiro, Inc., in consultation with: Land Ethics, Inc.; & Dunn Engineering Associates;
- East Main Street Urban Renewal Plan Update: 2008, and GEIS, prepared by: Town of Riverhead Community Development Agency with assistance from AKRF, Inc. and Dunn Engineering Associates, P.C.; and
- Town of Riverhead, DC-1 Zoning District Bulk Study: October 2009, prepared by AKRF, Inc. and funded by the Quality Communities Grant from the New York State Department of State for the Riverhead Downtown Redevelopment Consensus Initiative.

The following is a chronological outline of previous plans and land use studies that guide land use and other policies within the Study Area and summaries of relevant recommendations for consideration in the preparation of this study.

<u>Town of Riverhead East Main Street Urban Renewal Plan: October 1993.</u> Several improvements that were recommended include the development of new and attractive buildings, elimination of blighted buildings, and land use and zoning changes, including the development of a waterfront park.

- Support applications for commercial and recreation uses that are more directly related to the waterfront;
- Promote additional open space and community facilities for tourists and local residents;
- Encourage pedestrian access, tourism, and improved scenic vistas;
- Allow pedestrian access to the waterfront ensuring connectivity between East Main Street and the Peconic River;
- Enlarge public space along the river corridor south of East Main Street by reducing land dedicated to parking;
- Improvements to maintain view sheds.

Since the adoption of the 1993 Plan, the Town has introduced various programs and improvements to the downtown area consistent with the recommendations of the plan. There have also been several land use/development projects and public policy changes within the East Main Street Urban Renewal Area (EMSURA) that have impacted the character and intent of the EMSURA. Such changes include the development of the Long Island Aquarium and Exhibition Center; the adoption of several planning documents, including the *Town of Riverhead 2003*

Comprehensive Plan (2003 Comprehensive Plan) and a subsequent change in the zoning within the EMSURA from Business D District to the Downtown Center 1: Main Street (DC-1) and Downtown Center 2: Waterfront (DC-2) Districts.

A Vision Plan for Downtown Riverhead: June 1995. This report was prepared as part of the project, the Blueprint for Riverhead Landing, which was a planning effort based upon a partnership of business, government, and residential interests. This report focused on the revitalization of the downtown Riverhead Business Improvement District (BID) and contains design guidelines. Master Plan Components include recommendations for vehicular infrastructure improvements, parks, plaza and public garden, and identification of special districts such as a transportation center, court district, financial district, art district, and entertainment district. It includes details and cross sections along Main Street and design guidelines to calm vehicular traffic for pedestrian as a priority. The plan proposed construction of a multi-story parking structure north of Main Street between Roanoke Avenue and East Avenue.

Railroad Street Urban Renewal Plan: April 1997. On April 1, 1997 the Town of Riverhead Urban Renewal Plan for the Railroad Street Corridor was adopted, which included Railroad Street (aka Railroad Avenue), Cedar Street, and Court Street, as well as segments of Osborn Avenue and Griffing Avenue. The Railroad Street Urban Renewal Area included approximately 31.6 acres (41 parcels) and was characterized by predominantly commercial uses, with some examples of vacant, institutional, and residential properties. The primary goals of the Study were to reduce blight and stimulate economic development by utilizing the techniques of acquisition, demolition, redevelopment, rehabilitation, code enforcement, and public improvements. The Railroad Street Urban Renewal Plan made recommendations including filling existing vacancies, expanding institutional uses, improving and expanding parking areas, encouraging commercial uses, redevelopment or reuse of buildings with historic or cultural significance, reconfiguration of certain parcels, developing public facilities, and developing a transportation hub at the railroad station.

Revitalization Strategy for Downtown Riverhead: August 2000. This report includes a vision statement and several goals and objectives. A goal of the report is to "*develop tourist and Specialty Shopping Niches and a Variety of Tourist Attractions*" and objectives included under this goal are:

- Promote specialty food markets and restaurants, and more specifically to pursue an indoor public market or specialty supermarket on the north side of Main Street and specialty or ethnic food markets;
- Encourage outdoor dining;
- Promote stores and restaurants oriented to children and families;
- Support the growth of downtown attractions and foster development of the arts;
- Encourage coordinated marketing and programming for downtown destinations, in order to promote longer visits.

The report also discusses the underutilized waterfront and includes comments and recommendations received from focus groups. Another recommendation was to create a recreational trail along the Peconic River extending from downtown Riverhead to the Tanger Outlets.

Town of Riverhead Comprehensive Plan: November 2003. In November 2003, the Riverhead Town Board adopted the Town of Riverhead Comprehensive Plan Update. Early in the planning process, the Town gathered input from focus groups, residents, merchants, and community leaders on their vision for Riverhead and the issues related to land use and development in the Town. There was general agreement that emphasis should be placed on the revitalization of the downtown as a critical issue in the overall improvement of the Town. It was recommended that the downtown be primarily developed as an entertainment, tourism, and cultural center. The 2003 Comprehensive Plan set forth recommendations and policies specific to the area in and around the East Main Street Urban Renewal Area (EMSURA), including the Peconic River waterfront in the downtown area. As a result of the adoption of the 2003 Comprehensive Plan, the Town amended its zoning regulations in accordance with the recommendations in the plan. This included rezoning the EMSURA from the Business D District to the Downtown Center (DC) District. This district was separated into five distinct categories (DC-1 through DC-5), "*each tailored to a distinct part of the downtown area, intended to carefully balance downtown land uses and development patterns in a manner that fits into the historic and natural context of the area*." The intent of the DC district is to limit sprawl, thereby protecting open space; promote and develop the downtown as the cultural, civic, and tourist center of Riverhead by providing a vital, high-density, mixed-use environment; accentuate the visual quality of the waterfront as well as increase public access to the waterfront; promote transit, pedestrian, and bicycle use; embrace the historic character of the area through preservation of significant historic structures and architectural review of new structures; and provide community facilities.

The Comprehensive Plan included a residential build-out scenario and analyzed the build-out under current zoning and under proposed land use with and without implementation of a Transfer of Development Rights (TDR) program. The purpose of the residential build-out scenario was to evaluate the results of establishing an Agricultural Protection Zone (APZ) that would allow primarily single family dwellings at a density of one dwelling unit per 80,000 square feet, or land preservation through a TDR program wherein development is transferred to defined receiving areas, including downtown Riverhead.

Recommendations of the Comprehensive Plan were extensive and included many actions relevant to this BOA Nomination including the following:

Business District:

- Develop tourist and specialty shopping niches and a variety of tourist attractions;
- Promote specialty food markets and restaurants; pursue an indoor public market or specialty supermarket on the north side of Main Street; pursue specialty or ethnic food markets; and encourage outdoor dining;
- Promote stores and restaurants oriented to children and families;
- Support the growth of downtown attractions and foster development of the arts;

- Encourage coordinated marketing and programming for downtown destinations, in order to promote longer visits;
- Expand the waterfront park west to the Court Street Bridge and establish a continuous waterfront trail.

Land Use:

- Promote tourism/resort campus for West Main Street to provide opportunities for overnight accommodation and recreational amenities;
- Work towards a revitalized downtown that is retooled for tourism, with unique cultural attractions, and an expanded and improved waterfront park;
- Create walkable hamlet centers that serve as centers for community life and provide day-to-day shopping and services for residents, as well as specialty shopping for tourists;
- Provide improved access to waterfront areas for recreational purposes;
- Promote a strong Town identity and heritage, with protected scenic vistas and beautifully restored and reused historic buildings.

Parks & Recreation:

- Establish a public greenway system (along Peconic River) with walking and hiking trails, along with bicycle lanes and bikeways;
- Prepare a five-year greenway development plan, and update the plan periodically until the greenway system is completed.

East Main Street Urban Renewal Plan (URP) Update: 2008. The URP Update included 60 recommendations. A few key recommendations (relevant to this BOA Study) are provided below:

- Rec #9: Support applications for commercial and recreation uses that are more directly related to the waterfront and incorporate site layout requirements, including minimum setback requirements from the waterfront so that public access is not inhibited.
- Rec #10: Promote additional open space and community facilities for tourists and local residents. Public spaces should be strategically placed throughout the EMSURA to encourage pedestrian access, tourism, and improved scenic vistas. Within the western portion of the EMSURA, south of East Main Street across from Benjamin Street, the Town should encourage land or access easements that accommodate open areas allowing pedestrian access to the waterfront ensuring connectivity between East Main Street and the Peconic River.
- Rec #11: Maintenance and enlargement of public space along the river corridor, south of East Main Street by reducing land dedicated to parking, should be considered a high priority; and the Town should seek public/private partnerships to make improvements and maintain view sheds. Further, development other than public open space should be discouraged within this area to eliminate a conflict of use.
- Several recommendations included focus on waterfront, pedestrian access, tourism, improved scenic vistas, dual-entrance design;
- Several recommendations included specific improvements for pedestrian crossings, traffic improvements, storm drainage, and solid waste management.

- Extensive recommendations for traffic circulation and parking recommendations.

Town of Riverhead, DC-1 Zoning District Bulk Study: October 2009. This study includes visual 3-D modeling of the DC-1 district. Recommendations within the report are summarized from previous studies. The Study Area included DC-1 district which is comprised of 116 tax lots. Out of 116 tax lots, 63 tax lots were excluded from build-out calculations because of reasons including historic status, being part of existing development project or having been recently developed. The remaining 53 tax lots were modeled as build-out based on the following assumptions:

- Rezoning of East End Arts Council to DC-2 district;
- Rezoning of area between East Avenue and Ostrander Avenue to DC-3 Office district; and,
- Maximum build within the DC-1 district would be 80 percent lot coverage and FAR of 4.0.

The Build-out indicated that the Study Area could accommodate 1,059,575 square feet of space based on existing zoning provisions. The study did not evaluate the associated need for utility, vehicular, parking, or other improvements to accommodate the build out.

As is evident from the summaries above, the Town of Riverhead has conducted many planning evaluations for purposes of improving and revitalizing the Town, including downtown Riverhead and the Town's gateways. This BOA Study builds upon the past recommendations and evaluates where redevelopment of strategic sites and other measures can achieve the overarching goals of the Town of Riverhead expressed in these various documents.

1.2.2 Potential Brownfield Sites

The primary community revitalization objectives to be achieved by this program include blight removal, property upgrades through redevelopment, and the attraction of land uses to the Study Area that will provide needed goods, services and jobs to the community. Potential brownfield sites believed to be impediments to redevelopment within the Study Area were identified as part of the grant application and based upon prior land use. As described in detail in **Section 3.2.2** of this Study, a preliminary inventory and assessment of properties that may have been adversely affected by past land use activities or that may currently pose risks to the environment due to site uses or known handling, storage, or disposal of hazardous materials was conducted. The analysis identified numerous vacant and underutilized properties, as well as properties with a history of environmental contamination, and several specific opportunities for redevelopment. Through this process, seven key strategic sites were identified where redevelopment will be anticipated to have the most beneficial impact for revitalization within the BOA Study Area as a whole.

1.3 Community Vision, Goals and Objectives

The Community Vision, Goals and Objectives evolved from an extensive community participation process that engaged stakeholders since the spring of 2013 and included a community survey, intercept surveys administered during the 2013 Country Fair, two public workshops, numerous focus groups and periodic steering committee meetings and status update presentations during Town Board work sessions. The community participation process is described in detail in **Section 2.0** of this Nomination Study. If one could sum up the vision from the results of meetings, surveys, and other techniques used to gather a sense of what the community seeks to achieve, it would be that downtown Riverhead has all of the ingredients to be a successful visitor destination. While Riverhead is a gateway to the north and south forks, downtown Riverhead is and should be marketed as a destination on its own –in addition to being the end point or the beginning point of a visit to eastern Long Island. The Study Area's assets include:

- Advantageously located at the terminus of the Long Island Expressway by which people go on to travel to locations on the North and South Forks;
- A station on the LIRR Main Line which provides regional access to other Long Island communities and the New York City region;
- Home to the Long Island Aquarium, Suffolk Theater, Tanger Outlets, and other major destinations;
- Served by available sewer and water infrastructure, which allows for additional redevelopment and growth;
- Has all of the features of a successful town, including historic and architecturally attractive buildings, transportation circulation system, nearby major employment centers, and other positive elements.

Despite all of these assets, there are a number of barriers to revitalization that the area faces and which are addressed in this Nomination Study.

The following describes the Goals and Objectives that have been expressed by the community in order for it to achieve its vision for the Town of Riverhead Peconic River/Route 25 Corridor Brownfield Opportunity Study Area which is provided at the end of the section. The primary goal that has been expressed throughout the community participation process is that stakeholders desire that the BOA Study Area be revitalized in a way that captures a greater share of the visitors who come to the community to create a critical mass of economic activity. Community revitalization objectives to achieve this overarching goal include:

- revitalization of downtown Riverhead by attracting development that emphasizes and accommodates agritourism and ecotourism activities and uses;
- rebranding downtown Riverhead to assist in attracting new visitors and create a cohesive identity for the community;
- improving the gateways to the downtown and enhance opportunities for redevelopment in the gateway areas;
- enhancing the buildings, streetscape, and uses along Main Street and the Arts and Historic Districts;

- making downtown pedestrian friendly;
- planning for transportation improvements which accommodate growth;
- providing unique cultural attractions; and
- improving Peconic River access and expand the range of available recreational opportunities.

The Town is well aware of the many and significant assets which are located within or surround the Brownfield Opportunity Area. These assets include but are not limited to the Peconic River which is a NYS designated Wild, Scenic & Recreational River Corridor, a major multimodal regional transportation network, a successful retail outlet market, the Long Island Aquarium, theaters, restaurants, shopping and residential neighborhoods. The Town envisions revitalizing

The Vision for the BOA Study Area recognizes the significance of Downtown Riverhead as the historic, cultural, and governmental center serving the Town, and the Town seeks to promote its continued evolution as a unique, regional destination that showcases the Peconic River as the scenic and recreational blueway which links the many cultural, historic, and entertainment opportunities along the waterfront.

The Vision for Downtown Riverhead is to continuously improve and create a successful and thriving historic downtown. The downtown encourages sustainable building and green infrastructure to promote a healthy environment for all that live and work there, and all that seek to enjoy the many attractions in the area. The downtown provides a compact development of mixed uses that provide a safe, inviting, and enlivened atmosphere featuring thriving local businesses, an active arts community, housing choices where residents can live in and near the downtown, restaurants offering locally sourced products, riverfront recreational activities, and events that appeal to residents and attract visitors.

Downtown Riverhead should continue to utilize its location in the East End of Long Island and access to the various local vineyards and farms to promote an expansion of the current agritourism industry. The downtown will continue to be enhanced as an arts destination with programming to attract visitors to the downtown throughout the year.

The gateways to the downtown provide a mix of land uses and a streetscape that is aesthetically pleasing and accessible for safe transport of motorists, bicyclists and pedestrians. Uses which complement the Downtown and are attractive to visitors will be promoted along the gateway corridor, and will serve to draw visitors to the downtown. The vision for the West Main Street gateway area is to provide a low density rural environment that encompasses a conservation easement along the river to allow for a continuous public river walk. This area also includes a new focal point in the vicinity of Mill Road where redevelopment will be encouraged to create a mix of visitor focused attractions including restaurants, lodging and river oriented uses to complement the similar amenities and boat landing that exist in the area today.

the Peconic River/Route 25 Corridor, which encompasses downtown Riverhead, by rebranding and promoting the downtown as a destination (using a new brand and website www.WelcometoRiverhead.org). This revitalized corridor will be redeveloped with uses that allow it to fully capture the economic benefits of the many visitors who come together in Riverhead, as a mixed use destination that can cater to visitors and residents alike by expanding and strengthening the recreational, cultural, and entertainment base within downtown Riverhead and its gateways. The following provides a Vision Statement for the Town of Riverhead Peconic River/Route 25 Corridor.

1.4 Brownfield Opportunity Area Boundary Description and Justification

The proposed BOA Boundary Map is illustrated on **Figure 1-3** and narrative description was provided in **Section 1.1**. The proposed BOA Boundary has been selected to include abandoned

and underutilized sites proximate to the Peconic River and gateways to downtown Riverhead, as well as those underutilized areas within the downtown (including properties in the vicinity of the train station on Railroad Avenue), and in the Town designated historic area along 2nd Street. The borders of the BOA Study Area encompass properties which were identified as vacant or underutilized, in need of redevelopment, and properties that were identified as potential brownfield sites. Of these sites, eight sites are considered strategic redevelopment sites, in that these properties are located in areas where redevelopment would be expected to act as a catalyst for redevelopment and revitalization of the surrounding areas as well.

2.0 COMMUNITY PARTICIPATION PLAN & TECHNIQUES TO ENLIST PARTNERS

2.1 Introduction

The main goals of community participation for this project were to arrive at the community's vision for the Study Area, understand the barriers to redevelopment of underutilized properties and receive input on concepts and action strategies to achieve that vision. Having community support for the vision is essential for driving implementation. This section of the Nomination Study summarizes the elements of the community outreach effort, including the strategies and techniques used, outreach materials and methods, and input received throughout the project, which was employed in the development of strategies and recommendations.

The outreach effort for the Riverhead Step II BOA was comprised of a variety of community participation activities and employed many strategies to draw input from a broad range of stakeholders, as well as potential project partners. This input shaped development of the Nomination Study, in that the Town's project manager, Steering Committee, and consultant team[6] relied upon community input to learn about the history of the area and specific sites, to evaluate the level of support for specific redevelopment concepts, and to assist in refining the overall community vision.

TOWN OF RIVERHEAD SIGNAGE IDENTIFYING THE RIVERFRONT IN DOWNTOWN RIVERHEAD.

Thoughtfully planned community outreach was a main goal. The Town and Steering Committee felt that engagement would be most effective if community members have something specific to react to, as the community is interested in seeing action. The Team also recommended framing this BOA Step II Study as an opportunity for revitalization not only of individual properties within Riverhead but for the community as a whole. The Team collaborated to identify the goals for each participation activity, (meeting, focus group, survey, or public event) and planned each event with the goals in mind.

Through these events and activities, the opinions and perspectives of approximately 60 different organizations and/or stakeholder groups are represented. What follows is a summary of community participation activities and input received by these activities.

Table 2-1 lists the meetings held with the Steering Committee and Town Board to solicit input and comments.

[6] NP&V, N&P and Sustainable Long Island

TABLE 2-1
KEY DATES AND TOPICS OF STEERING COMMITTEE AND WORKING GROUP MEETINGS

Meeting Date	Topics Covered
April 25, 2013	Introduction of Project Team; overview of BOA program; transportation related tasks
June 27, 2013	Project update; community participation and outreach approach; the marketing component
July 18, 2013 *(working group meeting)*	Marketing component: preliminary ideas for website, logos, and discussion about marketing materials
September 18, 2013	Content of community survey; outreach for community survey; preparing for focus groups; economic and market trends analysis; Wild Scenic Recreational Rivers (WSRR) designation
August 23, 2013	Project status update; field tour of Study Area with NYS Department of State
October 28, 2013	Presentation of traffic analysis and one-way Peconic Avenue option
October 31, 2013 *(Town Board Work Session Presentation)*	Project status update; review of key goals for this project; update on traffic analysis and on findings from a one-way northbound Peconic Avenue option; update on community survey
December 4, 2013	Existing conditions and constraints to redevelopment and revitalization within the Study Area; update on community outreach and preliminary survey results; discussion of issues and opportunities and identification of strategic sites.
February 27, 2014 *(Town Board Work Session Presentation)*	Key findings pertaining to WSRR, Transportation, Demographics, Economic and Market Trends; update on Community Outreach and survey results; discussion of proposed public workshop; and next steps
May 9, 2014	Recap of March Public Open House; Economic and market trend analysis; announcement about approval of additional WSRR Community Area and 2nd Street National Historic Register District; announcement about and preview of May Open House workshop; alternative development scenarios; marketing and branding proposal and next steps; introduction to local graphic image group
February 10, 2015	Steering Committee Meeting to present the logo and website landing page prepared by Graphic Image Group, marketing consultant. While the group appreciated the professional photography and design of the landing page, they also felt that more resources need to be provided for marketing so that the website could be made more interactive. The importance of having a consistent font to utilize on the webpage that is transferrable to other mediums such as banners and signage was stressed.
May 21, 2015	Town Board Work Session Presentation regarding Creative Placemaking Plan proposal and new contract item to retain WaterFire International to prepare a Plan to assist the Town in hosting large scale events with WaterFire as a potential event.
June 11, 2015	Town Board Work Session Presentation.
December 3, 2015	Town Board Work Session Presentation.
March 17, 2016	Town Board Work Session Presentation on recommended modifications to application for WSRR Community Designation by the NYSDEC.
April 15, 2016	Final Steering Committee Meeting.

2.2 Steering Committee Involvement

Through adoption of Resolution #246 on April 3, 2012, the Town of Riverhead appointed a group of engaged community members to serve on the Downtown Riverhead BOA Steering Committee and assist with implementation of the BOA Grant. The role of a Steering Committee is to represent the community and its interests in the BOA process and to serve as an advisory group to the Town and Project Team (consultants hired by the Town to carry out the BOA study) for the duration of the project. The Steering Committee is also responsible for helping to encourage public participation and strengthen partnerships to advance the BOA project, assisting with effective communication, and identifying local priorities. The Steering Committee was comprised of five (5) representatives of the Riverhead community:

- Ray Pickersgill, President, Riverhead Business Improvement District (BID), Business Owner
- Janine Nebons, President, Riverhead Chamber of Commerce and General Manager, Tanger Outlet Center
- Bryan Deluca, General Manager, Long Island Aquarium
- Dee Muma, Owner/Developer, 1 East Main/10 Peconic Avenue
- Dennis McDermott, Proprietor, The Riverhead Project

In order to accommodate the Project Team's need for frequent feedback and in the interest of efficiency and timeliness, a Working Group was established with two Town Councilpersons representing the Town in addition to the other five Steering Committee members: Councilwoman Jodi Giglio and Councilman John Dunleavy. Finally, a local architect whose office is located within the Study Area, Glynis Berry, was asked to join the group's working meetings and to provide input about local issues related to land development and community sewering. The Project Team participated in and presented at eight (8) Steering Committee meetings and one working group session covering a range of topics. Each meeting yielded insightful comments and contributed valuable information to the project. In addition, the Project Team has coordinated numerous meetings with Town employees and agency representatives and presented at a Town Board Work Session. Below is a summary of major themes and key information that has come out of the Steering Committee meetings and Working Group meetings.

As several of the early Steering Committee meetings focused on transportation, one common recurring theme raised during several of the Steering Committee meetings was that of safety and walkability. Attendees and participants expressed concern about the need for improved pedestrian and bicycle safety and stressed that walking and walkability are important characteristics of a successful downtown. Similarly, comments were made about the currently slow and difficult traffic pattern throughout downtown. Participants expressed concern about not being able to turn left at Roanoke Avenue during one traffic presentation and the Project Team explained that part of the project scope is exploring multiple traffic options, including one that would provide a one-way (northbound) Peconic Avenue improve the level of services for motorists as well as simplify a complex intersection, thus achieving an environment with potential for greater pedestrian safety as well. It was noted that N&P is coordinating with appropriate Town, County and State agencies to facilitate repairs that can accommodate additional travel and turning lanes consistent with their analysis and determining how these modifications can be accommodated within the existing roadway without loss of parking (if feasible).

Another common theme is regarding the general look and feel of the downtown - the need for aesthetic improvements - and way-finding, specifically signage. Many such comments focused on the Main Street/Route 25 Corridor and the condition of existing structures along West Main in particular. Building on another common theme - the need for improved access and recreational opportunities along the riverfront, which is disconnected from Main Street - some suggestions for this area include expansion of a greenway or walking and biking trail; open space, parks or gardens; and other mechanisms to increase access to the Peconic River. Other suggestions were made about using these areas for a mix of shops, restaurants, and other uses that would support river-oriented recreation. Several participants stressed a need for more visual focus and a coherent or consistent theme or branding. Ideas for overall visual enhancements suggested include a fountain, historic themed gas lights, branding as a historical or cultural corridor, and an improved "gateway" along Route 25. It was noted that the Town is interested in pursuing having the historic district on 2nd Street listed on the National Register and the Project Team provided additional information as a follow-up to that conversation. The inventory for a new National Register Historic District for the 2nd Street area was subsequently prepared and has been submitted to the State Historic Preservation Office for consideration.

Parallel to the comments about the look and feel of the downtown, concern was repeatedly expressed for the condition of the properties along the western portion of Route 25. Specifically, concerns were raised about the Town Zoning Code and New York State Department of Environmental Conservation (DEC) WSRR Recreational River designation, which includes lands that contains continuing pre-existing nonconforming uses and some vacant/blighted sites, noting that there is no incentive to change pre-existing nonconforming uses and no ability to redevelop more compatible/beneficial uses because of the strict regulations applicable to properties within the designated area. The Steering Committee and Town are interested in exploring the possibility of a Transfer of Development Rights (TDR) program as a mechanism for implementing a transfer area on the south side of Route 25 for purposes of creating a greenway, and to establish a receiving area on the north side of Route 25 that would facilitate redevelopment of properties on the north side of Route 25 by increasing the allowable density. The majority of development would be transferred away from the river thus increasing publicly accessible open space and environmental protection. As part of the same discussion, it was mentioned that there is some interest by commercial businesses in the properties on the south side and there is some interest on the part of the Steering Committee to have someone open something "that provides a benefit." It was noted that an examination of the redevelopment potential within the WSRR in a Community Designation area is needed to see what density can be achieved and if this concept for transferring density from the south to the north side of Route 25 is feasible.

Redevelopment of properties on West Main Street would require further study and analysis of the feasibility of an extension of the sewer district was discussed. There was a general consensus that if the sewer expansion option proved to be cost prohibitive, then the exploration of a "no sewer" option to expedite realization of short-term goals and opportunities would be beneficial. Note that the “no sewer” option in this context refers to localized on-site treatment systems and technologies to mitigate pollutants and improve water quality. It was agreed that development of a short-term TDR program under existing Sanitary Code provisions should be investigated. It was also noted that if a segment of the comprehensive plan was adopted that included a

recommendation for a sewer district extension that would have a measurable benefit on the water quality of the Peconic River, (and which can be quantified), this would provide strong support for funding opportunities.

Signage came up several times in the context of the need for better or improved branding for the downtown district, as well as to help guide motorists through and where appropriate, to downtown. Participants urged that new signs be developed for the various gateways to the downtown to improve the overall look of the area. In addition, improved signs should be explored for the Long Island Expressway to indicate the best route to the downtown business district. For instance, exit 72 should specify that the historic route to the downtown is via Route 25 and exit 73 is the bypass or commercial corridor. Also needed are signs to the downtown for westbound traffic from the east end near 105 and on 25 where it intersects CR 58. As a result of these conversations, it was requested that the Project Team review the Town's Sign Code which is applied universally throughout the Town.

Other topics raised during steering committee meetings included:

- The condition of the Peconic River and the impacts of local development, the capacity of the sewer district, and the need to explore options for future sewage treatment. It was noted that the water quality of the Peconic River and estuary is impaired and that any plan should emphasize improvements to water quality. The Steering Committee liked the idea of localized treatment if extension of the sewer district is not feasible.

- Ways to conduct effective outreach and how to get meaningful participation and a good range of information from Riverhead stakeholders. It was suggested that for a project such as a BOA, qualitative information is just as important as quantitative information. Others suggested that as part of this project it is important to talk with real estate professionals who understand the market.

2.3 Public Open Houses

The Project Team held open house workshops on March 26th and May 20th 2014. These workshops were designed to solicit input about economic trends, land use, transportation, community vision statements, and preliminary redevelopment concepts. Stations were set up that presented information about the process and ideas for redevelopment, and participants were asked to comment and provide feedback on what they would like to see for the future of Riverhead by talking with Steering Committee members, Town representatives, and Project Team members.

FIRST PUBLIC OPEN HOUSE

Attendees offered many comments on the types of businesses they would like to see in downtown Riverhead. Generally people noted that they would like a mix of shops and activities related to businesses in order to complement the restaurants, bars, and pubs, and that they would like to be able to do more window shopping and find unique items not typically available in chain stores. Strong support was also seen for food shops and grocery stores, and businesses that stay open beyond the traditional 9:00 AM – 5:00 PM hours.

Participants were also asked to comment upon land use in Riverhead, and common themes emerged pertaining to better utilization of the riverfront for business and recreational purposes. Attendees expressed a desire for more special events in parks and along the river, and that "green building" designs should be encouraged, with wastewater treatment and water quality being a point of concern. Possible focal points in downtown Riverhead were also presented to the public, and the most support was given to a year-round skating rink followed closely by a carousel or spray fountain. These types of features are desirable as a way of setting Riverhead apart from other communities in the region.

The transportation input station was also popular at the open houses as residents and visitors are all impacted by traffic patterns – a common concern across Long Island. Attendees commented that walkways should be improved or expanded upon to connect parking areas North and South of Main Street, that additional pedestrian crossing signage should be added, and that adding sidewalks to connect Polish Town with downtown and the courts would be beneficial. Attendees also noted that the Town should encourage or facilitate public bike rentals, and three wheeled options for seniors, and that trolley or boat shuttle options should be discussed.

The Project Team used input from the community survey, Steering Committee, and focus groups to develop draft community vision statements, which were presented to attendees at the May 2014 Open House. Drafts A and B, stated as follows, received the most support:

FIRST PUBLIC OPEN HOUSE

DRAFT A) Riverhead's historic downtown will be a safe, inviting, clean and easily walkable center of thriving local businesses, a variety of cultural arts, restaurants offering locally sourced products, and recreational activities all highlighting a picturesque riverfront that offers boating and fishing opportunities with accessible transit connections. Its county seat of government will be a focal point of legal, judicial, and government related business.

DRAFT B) Downtown Riverhead will be a bustling town center comprised of restaurants with locally sourced products, theater, arts, and a variety of thriving small businesses, all surrounding a safe, accessible and beautiful riverfront. Its historic charm will be a source of pride and the downtown will be a destination for recreational activities, concerts, and events and day-trips. The county seat of government is a hub of legal,

financial and professional activity and there are convenient, seamless transit connections available.

These vision statements were used to develop a final vision statement included in **Section 1.3** for the future of the Study Area for inclusion in the BOA Nomination Study.

SECOND PUBLIC OPEN HOUSE

Potential concepts for redevelopment, based upon research, analysis, and input received through all prior engagement activities, were also presented during the May 2014 Open House. The first concept was for the redevelopment of the riverfront near Mill Road, with an emphasis on river-oriented recreation. All participants in this activity indicated that they would support this concept, stating that they thought preserving the water quality of the Peconic River was of the upmost importance.

The second concept for redevelopment was at Griffing Avenue and Main Street, with a grocery store and parking garage being the main focus. Participants in this activity stated that they would support the proposed concept, and commented that parking garages are needed and a "smaller, quaint scale" grocery store would be ideal.

The third concept presented was for redevelopment of the Long Island Rail Road station block, with the main focus being a coordinated mixed-use concept involving a parking garage connected to a combined commercial and residential four-story building. All participating community members were in favor of the proposed concept, and stated that they would like to keep parking free of charge.

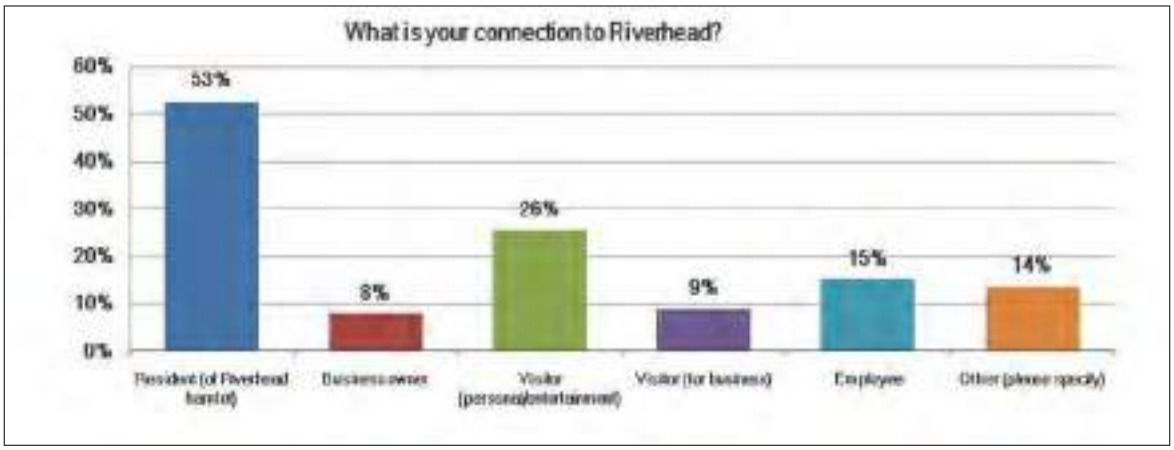
Overall, attendees conveyed the desire to see the Riverhead Study Area shape into a unique version of a New England style downtown with a thriving and creative atmosphere, that makes use of the Peconic River waterfront, and that is safe for pedestrians and yet accessible by car.

2.4 Community Survey

In order to help capture important information in an expeditious and efficient manner from a broad array of participants, the Project Team chose to survey residents, business owners within Riverhead, people who work in Riverhead, visitors, and people passing through the area. Initially the Team developed three separate surveys aimed at different populations that visit, live in, or work in Riverhead. The idea was to target these populations separately and tailor questions to them in order to isolate perceptions and opinions based upon participants relationships to the Study Area. In the end, the Project Team determined it would be more efficient and that the survey would yield a higher response rate if only one survey were conducted. Questions were combined and participants were asked to identify their relationship to the Study Area to ensure

the same types of information could be collected and analyzed. The final survey was designed to provide an understanding of who uses downtown Riverhead and how - where they go, what they do, what would compel them to spend more time and money downtown, and what else they would like to see.

The survey was conducted over a period of about six (6) weeks during the fall of 2013, and was available online as well as in paper form at four locations throughout Riverhead, including the Library, Town Hall, East End Arts Council, and Robert James Salon. The survey was promoted through a combination of online outreach via email, social media, and announcements on websites such as the School district, as well as an official press release through the Town, which was published on Riverhead Local, Riverhead News Review, Riverhead Patch, Long Island Business News, and Newsday. In addition, flyers announcing the survey were distributed to businesses throughout Riverhead. The Project Team also conducted "intercept" surveys in



HOW RESPONDENTS ARE CONNECTED TO RIVERHEAD

person during the Country Fair on October 13, 2013, asking people to answer a short selection of key questions from the survey or passing out business cards with a link to the online version for people to take at their convenience.

In total, the outreach efforts yielded 812 responses. More than 50 percent reported being residents of Riverhead and about 25 percent reported being visitors, for personal or entertainment purposes. Most respondents are in the Downtown area every day or at least once a week, typically on weekdays. Results indicated that respondents barely travel to the downtown area on weekends. Nearly 70 percent of respondents reported that their main reason for traveling downtown is to "go out to eat," while walking

COMMON WORDS USED IN COMMENTS ABOUT WHAT RESPONDENTS WISH THERE WAS IN RIVERHEAD

along the river and shopping were the second and third most common reasons for visiting downtown. Respondents indicated that they usually spend between $20 and $50 during their visit and typically spend money on meals (86 percent), snacks/beverages (48 percent) and merchandise (46 percent).

A significant majority (65 percent) of respondents said “more unique shops” are desired in Downtown Riverhead or along the gateways of Downtown. Close to half want more cafés and coffee shops (54 percent), just ahead of “more entertainment” (50 percent). A large majority of participants appear to be aware of what is already offered around Riverhead. The most well-known features include events at the Suffolk Theater, the weekly farmers' market and crafts show, and the annual cardboard boat race (combined 70 percent respondents). Specifically within the Route 25 corridors, nearly all respondents (94 percent) are aware of the Tanger Outlets, and nearly as many (92 percent) know about restaurants in the area. In addition, nearly all respondents are also aware of the Long Island Aquarium and more than three-quarters know about the East End Arts Council, Vail-Leavitt Music Hall, Suffolk Theater, and Suffolk County Community College culinary center.

When asked about how much money they typically spend during a visit to Riverhead, a large majority of participants (65 percent) reported spending more than $20, while 30 percent spend $50-$100, and 35 percent spend $20-$50. A majority of money spent by respondents while in Riverhead is on meals (89 percent), snacks and beverages (48 percent), and merchandise (46 percent).

Recurring comments were that the aquarium and hotels need to be made more affordable, the canoe/kayak launches could be more usable, and that there is a perception that the River walk area is less safe than other areas of the community. The most common suggestions or areas of concern were:

- Safety: need to increase police presence/24 hours full-time station/cameras needed to reduce criminal activities/drugs/loitering
- Rehabilitate old buildings/houses/improve downtown image
- Cleaner environment/clean up trash/more recycling
- More parking that is easily accessible
- Better crosswalks and pedestrian walkways
- Additional better quality entertainment or activities were suggested by many respondents, with suggestions ranging from inexpensive or unique shops, river-view restaurants, public art, movie theater, and specialty stores such as Trader Joe's

The survey also inquired about respondents comfort and safety in downtown Riverhead and specifically asked what suggestions they have to supplement the Town's installation of additional cameras and lighting. The most common suggestions were as follows:

- More police, foot patrols, more visible police presence, additional police sub-stations;
- Too many vacant stores; attract businesses and shops; attract visitors and residents; and

- Address homeless, loitering, drug users; increase safety at the Railroad station.

To understand what types of businesses (shops), attractions, improvements, and events or programs people think would benefit the town and be successful in Riverhead; four open-ended questions were asked, giving people an opportunity to offer their own thoughts and suggestions. A summary is provided in **Table 2-2**. Below are some of the most frequently mentioned items in the responses to these questions (in order of how frequently they appeared in the responses); the answers suggest both ideas to add and items that may need strengthening, review, or improvements. The most commonly listed responses include:

- Shops and businesses: Cafés/coffee shops and clothing stores (including several mentions of menswear)
- Attractions: Movie Theater was the most commonly listed
- Improvements: Enhanced or upgraded sidewalks and pedestrian safety
- Events and programs: Live music and more festivals

TABLE 2-2
TYPES OF BUSINESSES, ATTRACTIONS, IMPROVEMENTS AND EVENTS PEOPLE BELIEVE WOULD BENEFIT RIVERHEAD

Types of Shops	Attractions	Improvements	Events or Programs
Clothing	Movie Theater	Sidewalks	Events *(river-related, sporting, in empty buildings, concerts, fairs, fitness, kids, etc.)*
Coffee shop	Music	Parking	Festival
Food	River *(activities on/near)*	Lighting	Music
Restaurants	Shops	Stores	Concerts
Boutiques	Boats	Clean	Movie
Antiques	Restaurants	Traffic	Street fair

Finally, most respondents (89 percent) heard about the survey either through email, social media, or another online outlet. Respondents who took this survey live in over 100 zip codes with the majority living on Long Island and 36 percent from the Riverhead zip code of 11901. Eighty-eight percent of survey respondents are over the age of 30; 48 percent fall within the 30-54 age-group.

More detailed analysis can be found in the Survey Summary included in **Appendix A**.

2.5 Interviews

In order to gain a better understanding of the context of Riverhead demographics and to gather information about existing conditions, opportunities and challenges or barriers to redevelopment, the type of vision people have for Downtown Riverhead, and potential future uses or redevelopment ideas, as well as how to attract people and businesses to Downtown Riverhead,

the Project Team conducted 19 one-on-one interviews on an as-needed basis to supplement input and information received through the Steering Committee, community survey, and the focus groups. The interviews are intended to help the Project Team understand what will drive the renewal of Downtown Riverhead and what is needed to support people moving into downtown – what businesses and services people use, what people do, where they come from and where they go, why businesses choose to locate in Riverhead, what they need to be more successful or what they think other businesses might need in Riverhead (i.e. specific obstacles to doing business). Information gathered through the interviews is being used to supplement quantitative data and will in turn inform the economic and market trends analysis, as well as the marketing and rebranding components of the BOA project. This input will also be valuable in the design of redevelopment scenarios.

The Project Team conducted interviews with 19 different individuals over the course of the project. In some cases, the interviews were formal one-on-one meetings between members of the Project Team and community stakeholders, while in other cases, people called the Project Team to discuss a project component and the conversation evolved into an interview of sorts, yielding valuable qualitative information. Below is a brief summary of some of the most common themes, issues, and ideas that were shared as part of the interviews.

Interview subjects offered a range of issues for the Project Team to consider and explore, including traffic speed, safety, and flow/patterns throughout town, as well as use of and demand for public transportation, and improving the look and feel of downtown. Specifically, the following were mentioned (it is noted that some of the input provided is for locations outside of the Study Area):

- Look at traffic safety from or near the schools and the hospital (Roanoke Avenue, Pulaski Street) and traffic speeds throughout the area, but specifically westbound near the Hilton Hotel approaching the Long Island Expressway (LIE). Similarly, efforts should be undertaken to encourage walking. It was observed that people are so accustomed to their cars, they hesitate to even walk a few blocks down Main Street, but a better and more pedestrian-friendly atmosphere may help address this issue.
- Consider possible changes to traffic patterns at Route 58 at the western entrance to Tanger, and access to the Hilton Hotel in light of the new pattern with no left turn for northbound vehicles on Kroemer Avenue.
- Ensure that the focus of the BOA project is not just on Main Street; consider the conditions and issues behind and off of Main Street as well (i.e. houses for drug rehab and boarding houses). It is important to consider how these neighborhoods impact Main Street and the potential they have as well.
- Use of public vs. private transportation to get people from destination to destination within Riverhead. It was noted that many of the hotels provide their own shuttle services.
- Similarly some business owners noted the need for better and more coordinated public transportation with the Long Island Rail Road, as customers report taking the train to Ronkonkoma and then have to rely on cabs to travel to Riverhead.
- Improving the look and feel of downtown and thinking of "out of the box" ways to accomplish this, through form-based zoning, or large mixed-use projects, like ArtSpace in Patchogue, for

example. Other more conventional ideas include: cleaning it up; repairing sidewalks, installing flowers, landscaping, and lights.

Interviewees also offered insight into barriers to redevelopment and a range of other comments on issues they experience living and working in Riverhead. Barriers to redevelopment cited include the down real estate market, concerns about environmental contamination and invasive species, and the constraints posed by the WSRR designation along West Main Street - specifically these latter two issues were mentioned in reference to the former duck farm, which is being considered as a strategic site for the purposes of the BOA study. Other comments touched on the need for additional housing on and near Main Street to help continue to support local businesses and downtown with a built-in customer base. An interview with the Commissioner of the Sewer District provided information about the capacity and flow within the district, current rates, permitting process, as well as issues such as sediment, infiltration, and the impact of outfall on local waters.

2.6 Focus Groups

Building upon initial information gathered through surveys, interviews, and data collection, the Project Team conducted a series of focus groups, fostering dialogue and opportunities to express views, opinions, and share information. The focus groups were kept to a relatively small number of participants in order to maximize dialogue and information sharing.

The Project Team conducted four (4) fruitful and informative focus groups with 34 individuals representing hotel employees, small businesses, agencies that serve and work with youth, and economic development and real estate professionals. The focus groups yielded good information about the needs, opportunities, and challenges facing the groups and their respective constituencies, as well as how and why people use Downtown Riverhead, what would make them spend more time there, as well as what they see as the primary obstacles to redevelopment. Summaries were created of each of the focus groups for distribution to the Steering Committee and some of the most common themes heard throughout the four focus groups are briefly summarized below.

<u>Assets/Opportunities</u>

- Other than professional business, visitors are attracted to Riverhead for its events and attractions. For example, weddings and the associated events bring parties to the area and it would be helpful to have more or better marketing and promotion of the town itself and all there is to do. In addition, Riverhead is home to attractions such as the LI Science Museum, the Aquarium, LI Winter Fest, and other events and venues. These types of attractions should be more widely promoted as part of a coordinated campaign.
- It was also suggested that a centralized 'concierge' service could be coordinated among multiple businesses and hotels so as to streamline the information.
- The Town - specifically the Community Development Agency and the Industrial Development Agency - is willing to work with property and business owners to identify resources and tools to make development feasible, and to help guide people through the process.

- Historic district - build upon the Historic District and develop the historic character into a theme for downtown.

Barriers/Challenges to Redevelopment

- Size and condition of existing commercial buildings - need to divide or rebuild in order to attract smaller businesses. Due to the size of many of the existing units (storefronts) and the amount of renovation that would be necessary to make them work, often it is easier to look elsewhere. It is much easier to lease smaller storefronts; the redevelopment of the larger department store type buildings, such as Swezey's, is difficult.
- Traffic - congestion and an overwhelming sense that traffic makes it unsafe to walk downtown.
- Parking - although parking seems adequate under current conditions, multiple participants expressed concern over whether the parking regulations and requirements are sufficient to accommodate the full build-out of the downtown area, were it to be built as current plans would allow.
- Clear, consistent policies and guidelines - It was stated several times by various focus group participants that consistency in government policy is crucial to attracting developers to downtown Riverhead so that people know what to expect and how to navigate the process.
- Fees associated with the sewer district and the need for additional capacity. Participants suggested that an exploration of how to make the connection fees more flexible while at the same time allowing for additional sanitary flow would be beneficial.

Needs

- Improve safety (increased police presence, improve lighting, slow traffic, repair sidewalks).
- Expand recreation opportunities, improve access to the riverfront, and encourage outdoor activities.
- Encourage activities - especially family-friendly and/or kid-oriented activities. Provide new attractions such as the proposed ice skating rink.
- Marketing & promotion:
    - It was generally agreed that Riverhead needs a clear, unified voice and that an ad campaign or similar measure would be beneficial.
    - Something must be done to change the negative perception of Riverhead that exists, especially among people from the regional area but not specifically familiar with Riverhead. Suggestions were made to start advertising it as the "bypass to Route 58" and others recommended that the historic and unique character be promoted. All agreed that messaging and bold marketing to change the perception is critically important to revitalizing downtown Riverhead. Others added that Riverhead should not be known or promoted as a gateway or a pass-through, but should develop its own identity or a niche, and market itself in line with that identity.
- Better signage: it is essential that signage be improved on all of the major gateways to Riverhead, in an effort to help drive people to Downtown and area attractions.
- Food businesses: people want and are looking for more food businesses, specialty shops, restaurants, marketplaces, etc.

- The following types of businesses were specifically suggested: an indoor marketplace (like a scaled-down Chelsea Market), family-friendly or kid-friendly restaurants, and Trader Joe's.

- Improve connections between East Main Street and West Main Street.
- Expand transportation options: Participants discussed the level of service currently provided by the Long Island Rail Road and Suffolk County Transit and the need for better service to and from New York City, as well as between various local destinations within Riverhead. In addition, transit options could be better coordinated so that connections between modes are easier and more efficient.

2.7 Resources

Project Website

SLI created and maintained throughout the course of the project, a page on its website dedicated to the Riverhead BOA project, which contained background information, announcements about and summaries of public workshops, a link to the community survey, opportunities to get involved and find out more information about the project, and documents prepared by the Team for the project. The webpage address is: http://sustainableli.org/what-we-do/brownfields/riverhead-boa/.

Public Workshop & Survey Outreach

The Team used a variety of methods and materials in an effort to ensure robust participation in public workshops. Both public Open House workshops were advertised through a variety of media outlets and in multiple formats, including in select local news outlets such as the East End Beacon, Riverhead Local, and the Riverhead News-Review and through a mix of other sources including electronic and social media as appropriate and in coordination with the Town of Riverhead. Official announcements made on behalf of the Town of Riverhead were coordinated through the Town's project manager in the Community Development Agency.

A "save-the-date" announcement was made in advance of each Open House to the Steering Committee and community contact database. Both public workshops were announced in advance via email, local newspapers, through community organizations, and flyers displayed at the Library, Town Hall, Suffolk County Community College Culinary Arts Center, East End Arts and assorted local businesses along Main Street. To ensure the Team reached a broad spectrum of the population and Study Area stakeholders, the Team distributed flyers and door hangers for the first open house in March 2014 and sent out nearly 2000 postcard mailers for the second open house in May 2014 (see examples of outreach materials below). Door hangers were focused on residential areas, while flyers targeted more public venues such as commercial and retail businesses, the indoor farmers' market, Town Hall and the Library. The Steering Committee assisted with publicizing Public Open Houses by distributing or posting announcements through group emails, websites, posting and handing out flyers. The Tanger Outlets, Riverhead CAP, and the Chamber of Commerce helped spread the word about these events by making announcements to their employees and members.

The Team also widely promoted the community survey; 200 paper copies and flyers were distributed to four locations (Town Hall, Riverhead Free Library, Robert James Salon Services,

East End Arts) and the survey was advertised through media outlets such as SLI's email newsletter and social media, Riverhead Local online newspaper, Riverhead News Review, Riverhead Patch, Newsday and Long Island Business News. Email and social media blasts were sent out through the Chamber of Commerce, Business Improvement District, and Peconic Bay Medical Center. Announcements were posted on the School District website and bulletin boards at the Town Senior Center, Suffolk County Historical Society, Salvation Army, Family Service League, Glenwood Village residences, and other locations. In addition, the Team conducted an in-person "intercept survey" at the Country Fair in October 2013 and handed out business cards that provided a hyperlink and QR code linking to the online survey.

Community Contact Database

A community contact database was created and maintained by SLI, tracking individuals and organizations that requested to receive information about the project, as well as the nature of communication with various groups, organizations, and individuals. This list served as the basis for email announcements to be sent out regarding public Open Houses and opportunities to get involved, such as the Community Survey. The contact database, updated regularly in conjunction with activities such as meetings, interviews, public open houses, and the community survey, includes names, phone numbers, addresses, and email addresses for each person.

Examples of outreach materials are provided on the following pages.

ANNOUNCEMENT ABOUT MARCH OPEN HOUSE IN EAST END BEACON

POSTCARD MAILER FOR MAY PUBLIC OPEN HOUSE

CARD USED TO PROMOTE COMMUNITY SURVEY DISTRIBUTED DURING 2013 COUNTRY FAIR

FLYER ANNOUNCING MARCH PUBLIC OPEN HOUSE

LONG ISLAND BUSINESS NEWS ARTICLE ABOUT COMMUNITY SURVEY

In summary, community participation was an integral component of the preparation of the BOA Study that informed the discussion of existing conditions, opportunities and constraints, and recommendations to improve the Study Area. **Plate 1** included at the back of this Study identifies the issues and opportunities that were identified through the community participation process. These issues and opportunities informed the development of the vision, goals and objectives and alternative development scenarios described later in this report.

Community participation established the vision which will guide future actions and implementation measures.

RIVERHEAD NEWS-REVIEW ARTICLE ON PUBLIC OPEN HOUSE

3.0 ANALYSIS OF THE BROWNFIELD OPPORTUNITY AREA

3.1 Community and Regional Setting

The Town of Riverhead Peconic River/Route 25 Corridor BOA Study Area, as the name implies, generally follows the Peconic River along NYS Route 25 (also known locally as West and East Main Street). The Study Area also includes Downtown Riverhead, from the Peconic River north to the railroad tracks. **Figures 1-2** and **1-3** included in **Section 1.0** provide the regional setting and study area boundary map, respectively. The BOA Study Area is within the Riverhead Census Designated Place (CDP). Demographic data and analysis are included later in this section for the CDP and the local market areas. Demographic data specifically for the BOA Study Area were obtained through ESRI Business Analyst and key Study Area characteristics are:

- Based upon the 2010 Census, approximately 1,856 people live within the BOA Study Area in 598 households[7].
- At that time, there were 664 housing units, of which 45% were owner occupied, 45% rented, and 9.9% vacant.
- The median household income was $47,484 and per capita income was $22,268.
- It was projected that in 2018, approximately 30% of households would have a collective income less than $35,000.

Although Downtown Riverhead has seen new vibrancy in recent years with the revitalization of the riverfront park, construction of a world class aquarium and Hyatt Conference Center and Hotel, the reopening of the Suffolk Theater, a healthy arts council and numerous popular restaurants and businesses, there are still obstacles that the downtown and its gateways confront. The following provides a list of the unique challenges the community faces within the Study Area:

- a high rate of commercial vacancies and abandoned properties,
- nonconforming uses and incompatible land use patterns,
- traffic congestion in the downtown related in part to an offset intersection in the center of town,
- need for improved pedestrian environment,
- parking issues,
- Peconic River/Estuary water quality,
- localized flooding during storm events,
- need for wayfinding signage at gateways and in the downtown area,
- the need to overcome a negative image with a rebranding effort, and,
- strict DEC imposed restrictions on redevelopment related to a designated river corridor which essentially institutionalizes the preexisting nonconforming uses.

[7] It is noted that the BOA Study Area represents portions of census tracts, and thus the estimated population is provided by ESRI for the customized geography.

The gateway from the west is anchored by a destination shopping center (Tanger Outlet Center) and a newly renovated hotel and lounge, and although there are many examples of appropriate residential and transitional businesses along Route 25, the positive are outweighed by an unattractive mix of nonconforming land uses, abandoned properties (including overgrown sites and vandalized buildings) and a lack of property maintenance. The river is within a few hundred feet of Route 25 in many locations along the route, but only a glimpse of the water is visible in short stretches. The Town's goal includes the creation of a greenway, envisioned as a low density residential and recreational setting along the river, including a pedestrian walk along the riverbank where possible to connect the numerous Town and County open space parcels and a revitalized downtown where people live, work, shop and have a high quality of life. Finally, a number of vacant, abandoned or underutilized sites are scattered throughout the Study Area and have been identified as contributing to blighted conditions that exist in some portions of the Study Area.

Summaries of Past Planning Documents

As part of the Study, NP&V reviewed past planning documents and have observed that the vision for the area has been generally the same for at least two decades. It is noted that a brief summary of planning documents plans was provided in Section 1.2.1; however, the following expands upon the summaries of the plans reviewed and identifies items completed and other relevant items for the purpose of developing recommendations for the Nomination. The following also includes a summary of the *Peconic Estuary Program Comprehensive Conservation and Management Plan*.

- A *Vision Plan for Downtown Riverhead* was prepared in 1995 which focused on the revitalization of the downtown Riverhead Business Improvement District (BID) area and provided design guidelines, vehicular infrastructure improvements, parks, a plaza and public garden, and identification of special districts (such as transportation center, court district, financial district, art district, and entertainment district). Traffic calming measures were identified and the **construction of a multi-story parking structure** north of Main Street between Roanoke Avenue and East Avenue was recommended. Variations on several of these ideas have since been implemented, such as parks and public garden improvements and the need for a parking structure in the future continues to receive attention.

- The *Railroad Street Urban Renewal Plan* was adopted by the Town of Riverhead Town Board in April of 1997. The Urban Renewal included Railroad Street (aka Railroad Avenue), Cedar Street, and Court Street, as well as segments of Osborn Avenue and Griffing Avenue. The Railroad Street Urban Renewal Area included approximately 31.6 acres (41 parcels) and was characterized by predominantly commercial uses, with some examples of vacant, institutional, and residential properties. The primary goals of the Study were to reduce blight and stimulate economic development by utilizing the techniques of acquisition, demolition, redevelopment, rehabilitation, code enforcement, and public improvements. The Railroad Street Urban Renewal Plan made recommendations including filling existing vacancies, expanding institutional uses, improving and expanding parking areas, encouraging commercial uses, redevelopment or

reuse of buildings with historic or cultural significance, reconfiguration of certain parcels, developing public facilities, and developing a transportation hub at the railroad station.

- The *Peconic Estuary Program (PEP) Comprehensive Conservation and Management Plan* was prepared in 1999 to identify measures to protect and preserve the Peconic Estuary System. The Plan identified five priority management issues within the Estuary related to water quality (Brown tide, Nutrient pollution, Threats to habitat and living resources, Pathogen contamination, and toxic chemicals). Out of this plan, the Brown Tide Comprehensive Assessment and Management Program was prepared, which included a recommendation to upgrade the Riverhead Sewage Treatment Plant (now underway). Other management recommendations applicable to the Riverhead BOA area include the need for improved stormwater management and eel grass, wetland, and habitat restoration. In regards to nitrogen, the PEP CCMP recognized high nitrogen inputs as a result of both point and non-point sources and as a result has adopted a "no net increase" in nitrogen loading to the estuary. The relevance of the TMDL for future land use and management of existing uses has led to analysis of potential sewage treatment within the BOA. In addition, it is noted that during the course of preparation of the BOA Step II, the PEP Coordinator provided input to coordinate efforts in improved water quality including specific recommendations for education of homeowners on the benefits of raingardens and the funding available for residential improvements for green infrastructure.

- The *Revitalization Strategy for Downtown Riverhead* prepared in August 2000 starts with a vision statement and includes several goals and objectives including development of tourist and specialty shopping niches and a variety of tourist attractions. Objectives include promoting specialty food markets and restaurants; pursuit of an indoor public market or specialty supermarket on the north side of Main Street; specialty or ethnic food markets; outdoor dining; stores and restaurants oriented to children and families. In addition the report encourages support for the growth of downtown attractions and fostering of the arts and coordinated marketing and programming for downtown destinations, in order to promote longer visits. The report estimates that there are 1,045,000 visitors to the downtown annually including 37,600 weekend summer visitors. The report also discusses the underutilized waterfront and a recommendation to create a recreational trail along the Peconic River from downtown to Tanger. Many of these ideas have come to fruition in the past 15 years, including the opening of many restaurants and microbreweries that attract visitors. Downtown events are continuing to be developed by various entities including the Chamber of Commerce, BID, and East End Arts. The Town has been successful in programming for small events and there is potential to attract larger events, such as WaterFire. As part of the BOA funding, a Creative Placemaking Plan has been prepared in association with WaterFire International, which can be utilized by the Town to attract and manage larger events to downtown Riverhead.

- The *Town of Riverhead Comprehensive Plan Update* was adopted by the Riverhead Town Board in 2003. The Town utilized public input to create a vision for Riverhead and identify major land use and development issues, including the need to revitalize the downtown area. The Update recommended that the downtown be primarily developed as

an entertainment, tourism, and cultural center. It also included recommendations and policies specific to the East Main Street Urban Renewal Area (EMSURA) and the downtown Peconic River waterfront area. The plan also included a residential build-out scenario which analyzed the build-out under current zoning and the proposed land use with and without Transfer of Development Rights (TDR) with the results shown in the excerpt below. The build-out scenario was used to evaluate the results of establishing Agricultural Protection Zone (APZ) that would either result in on-site development on 80,000 SF lots; or land preservation through a TDR program.

Table 2-14: Residential Build-out and Saturation Population Scenarios

	2000 U.S. Census	*2003 Housing & Demographic Estimates[3]*	*Build-out under Current Zoning[3]*	*Build-out under Proposed Land Use Plan[3]*	
				No TDR	*Full TDR[4]*
Total Housing Units	12,479	14,323[1]	23,800	20,000	19,000
- Year-Round Units	11,314	13,034	21,658	18,200	17,290
- Year-Round Households[2]	10,749	12,382	20,575	17,290	16,426
Total Year-Round Population[2]	27,860	30,956	51,438	43,225	41,064

1. *The total amount of housing units was calculated by adding 1,844 new privately-owned estimated residential units, which were authorized by building permit from January 2000 through April 2003, to the 12,479 units reported by the 2000 U.S. Census.*
2. *According to the LIPA 2002 Long Island Population Survey, November 2002, Riverhead had 11,223 year-round households and a total year-round population of 28,862.*
3. *It was assumed that the percentages of seasonal housing units, year-round households, and average household size (2.5 persons per household) would be the same at saturation as they were in 2000.*
4. *The "Full TDR" scenario assumes that one-third of the transferred development rights would be residentially absorbed and two thirds would be commercially absorbed through height, coverage and floor area increases. Further, the "Full TDR" scenario assumes that one-half of the development rights in the Residence AB-80 district are sent and one-half of the rights are received on parcels in the district.*

Sources: Town of Riverhead Planning Department, 2003; Suffolk County Planning Department, 2000; U.S. Census Bureau, 2000-2003; LIPA Long Island Population Survey, 2002.

Source: Town Comprehensive Plan Update, 2003

Since the adoption of the Comprehensive Plan Update, the Town has amended the zoning code in accordance with recommendations in the plan. The EMSURA was rezoned from the Business D District to the Downtown Center (DC) District and the district was divided into five categories (DC-1 thru DC-5) in order to balance downtown land uses and development patterns with the historic and natural context of the area. The DC District is intended to limit sprawl and protect open space; develop the downtown as a cultural, civic, and tourist center by creating a high-density of mixed uses; increase public access to the waterfront; promote transit, pedestrian, and bicycle use; preserve historic resources; and provide community facilities.

- The *East Main Street Urban Renewal Area Plan Update* was prepared in 2008. The study focuses on a portion of downtown Riverhead along East Main Street and includes a total of 60 recommendations. Several recommendations included focus on the

waterfront, pedestrian access, tourism, improved scenic vistas, dual-entrance design, and improvements for pedestrian crossing, traffic, storm drainage, and solid waste managements. Specific recommendations relevant to the BOA study include supporting applications for commercial and recreational uses that are more directly related to the waterfront and utilizing site layout requirements so public access is not reduced. Additionally, the plan recommends promoting and strategically placing additional open space and community facilities for tourists and residents to allow pedestrian access and ensure connectivity in the EMSURA. Along the river corridor south of East Main Street, the plan suggests enlarging public space by reducing the land dedicated to parking and discouraging further development in this area to prevent a conflict of uses.

- In 2008, a *Draft Generic Environmental Impact Statement* (DGEIS) was prepared as a guide for the East Main Street Urban Renewal Area Plan Update and to evaluate the EMSURA's ability to accommodate planned projects. The report included a total of 74 recommendations including encouraging different types of land use in the downtown, waterfront development, and improving infrastructure, traffic, transportation, and pedestrian access. The report contains build-out scenarios in 3 stages: short term (2007-2012), interim (2012-2017), and long term (2017-2022) with the results of each stage displayed in the excerpt below. The DGEIS included a transportation section which analyzed 2012 short-term traffic scenarios and determined that the short term development scenario would create an estimated 1,340 additional trips for Saturday midday peak hour traffic. Additionally, the analysis found that the short term development would worsen existing traffic and create an "F" level of service at numerous intersections. Recommended mitigation efforts included revising lane use, prohibiting parking on certain narrow streets, installing traffic signals, and providing additional turning lanes on certain roads. Additionally, the report analyzed the existing parking supply and demand as well as future parking demand for build-outs. The maximum observed parking demand for Town-owned spaces indicated 41 percent occupied spaces during weekdays in the EMSURA and 88 percent occupied spaces during weekdays outside of the EMSURA. When analyzing the build-outs, it was assumed that a 1,186 space parking garage would be constructed on town-owned property to serve additional parking demand from redevelopment. The results of the build-out parking demand analysis indicated a surplus of spaces during the short-term phase 1 development and a deficit of spaces during the short-term phase 2 development, interim scenario, and long term scenario.

Table S-2
EMSURA Build-Out Summary

Land use category	Existing (2007) (sf)	Short-term (2012) (sf)	Interim (2017) (sf)	Long-term (2017) (sf)	2007-2012 percent change	2012-2017 percent change	2017-2022 percent change
Commercial	127,459	650,775	1,150,065	1,317,485	411	77	15
Mixed use	20,384	251,873	251,873	251,873	1,111	–	–
Single family	9,526	8,382	4,224	4,224	(12)	(50)	–
Vacant buildings	178,982	–	–	–	(100)	–	–
Cultural and institutional	49,339	49,339	182,483	227,128	–	270	24
Recreation	84,528	79,272	278,989	345,956	(6)	252	24
Multifamily residential	–	202,505	224,605	289,739	100	11	22
Totals	470,218	1,242,146	2,092,238	2,436,405	164	68	16

Sources: AKRF, Inc., 2007, Town of Riverhead Assessor's Office.

Source: EMSURA DGEIS, Executive Summary, 2008

- In 2009, the Town of Riverhead conducted a *DC-1 Zoning District Bulk Study* by utilizing 3-D modeling of the DC-1 district. Out of the 116 tax lots in the DC-1 District, 63 were excluded from the study due to a number of reasons including the historic status of a site, a site having been recently redeveloped, being part of an existing project, or sites being used for Town of Riverhead public parking or infrastructure. In order to conduct the build-out analysis, it was assumed that the East End Arts was rezoned to a DC-2 district, the area between East Avenue and Ostrander was rezoned to DC-3 Office, and the maximum build within the DC-1 District would be 80 percent lot coverage and a FAR of 4.0. The report utilized the 2008 GEIS for sections regarding existing infrastructure and transportation. The build-out summary indicates an increase of 1,059,575 SF; however, the study does not include an analysis of mitigations recommended for utilities, infrastructure, transportation, or parking. The report summarized recommendations from previous studies but did not provide new recommendations.

Table 3-1 provides a summary of information and recommendations from previous planning documents that was most relevant in preparation of this Nomination Study.

TABLE 3-1
SUMMARY OF PREVIOUS PLANS AND RELEVANT INFORMATION FOR THE BOA NOMINATION

Plan Name	Relevant Details
EMSURA Update and DGEIS 2008	• Support applications for commercial and recreation uses that are more directly related to the waterfront; • Promote additional open space and community facilities for tourists and local residents; • Encourage pedestrian access, tourism, and improved scenic vistas; • Encourage land or access easements that accommodate open areas allowing pedestrian access to the waterfront ensuring connectivity between East Main Street and the Peconic River;

Plan Name	Relevant Details
	• Enlargement of public space along the river corridor south of East Main Street by reducing land dedicated to parking; • Maintenance of view sheds; • Provides build out for redevelopment for comparison to build-out of scenarios developed for the BOA Nomination.
Comprehensive Plan Update, 2003	Business District: • Develop tourist and specialty shopping niches and a variety of tourist attractions; • Promote specialty food markets and restaurants; • Specifically, pursue an indoor public market or specialty supermarket on the north side of Main Street; • Pursue specialty or ethnic food markets; • Encourage outdoor dining; • Promote stores and restaurants oriented to children and families; • Support the growth of downtown attractions and foster development of the arts; • Encourage coordinated marketing and programming for downtown destinations, in order to promote longer visits; • Expand the waterfront park west to the Court Street Bridge and establish a continuous waterfront trail. Land Use: • Tourism/ Resort campus for West Main Street to provide opportunities for overnight accommodation and recreational amenities; • A revitalized downtown that is retooled for tourism, with unique cultural attractions, and an expanded and improved waterfront park; • Walkable hamlet centers that serve as centers for community life and provide day-to-day shopping and services for residents, as well as specialty shopping for tourists; • Improved access to waterfront areas for recreational purposes; • A strong Town identity and heritage, with protected scenic vistas and beautifully restored and reused historic buildings. Parks & Recreation: • Establish a public greenway system (along Peconic River) with walking and hiking trails, along with bicycle lanes and bikeways; • Prepare a five-year greenway development plan, and update the plan periodically until the greenway system is completed.
Revitalization Strategies, 2000	• Develop tourist and specialty shopping niches & a variety of tourist attractions; • Promote specialty food markets and restaurants; specifically, pursue an indoor public market or specialty supermarket on the north side of Main Street; and pursue specialty or ethnic food markets; • Encourage outdoor dining; • Promote stores and restaurants oriented to children and families; • Support the growth of downtown attractions and foster development of the arts; • Encourage coordinated marketing and programming for downtown destinations, in order to promote longer visits.

Plan Name	Relevant Details
Vision Plan, 1995	• Identification of special districts such as transportation center, court district, financial district, art district, and entertainment district; • Design guidelines to calm vehicular traffic along Main Street for pedestrian priority.
PEP CMP	• Reduction of nitrogen load should be a focus of any redevelopment plans within the Study Area.

3.2 Inventory and Analysis

A thorough inventory and analysis has been conducted which has resulted in a comprehensive understanding of conditions and resources that relate to specific issues, constraints, and redevelopment opportunities.

The analysis of the proposed BOA provides the basis for decision-making regarding reuse potential for strategic sites and implementation of other actions/improvements to act as catalysts for revitalization of the area as a whole. Each of the resource areas were thoroughly inventoried and analyzed. The following sections summarize the key findings which directly relate to recommendations - in general as well as for strategic sites which are developed and summarized in **Section 4.0**. Accompanying figures are provided to supplement the narrative following the main text sections.

3.2.1 Land Use and Zoning

The BOA Study Area is approximately 495 acres in size and is generally situated along NYS Route 25 between the Long Island Rail Road (LIRR) to the north and the Peconic River to the south (with some exceptions at the outer reaches where parcels to the north of the LIRR are included). The Study Area stretches approximately 1.03 miles from west to east generally from the eastern end of the Long Island Expressway (LIE) east to Hubbard Avenue and also encompasses an area north of Main Street in downtown Riverhead (see **Figure 1-3**).

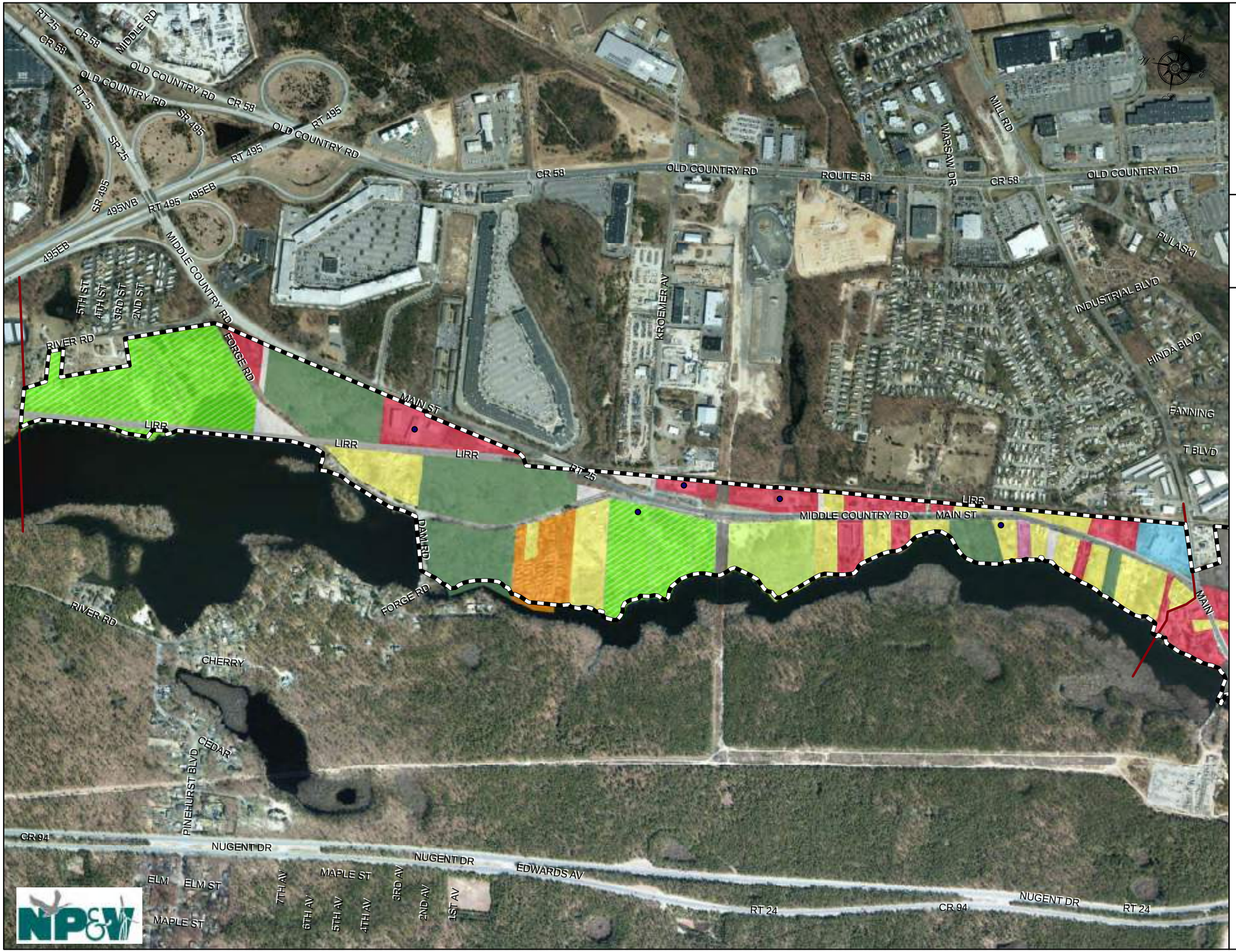
Approximately one-third of the Study Area encompasses the downtown and the easternmost portion of the Study Area, with two-thirds of the Study Area located to the west of downtown. It is noted that the Study Area boundary was modified twice since the BOA grant application was submitted. The modification added the rail station, County court area, municipal parking lots and commercial areas in the northern part of the downtown. This modification was largely completed to provide a more comprehensive assessment of the function and form within the downtown, and to provide a better foundation to integrate downtown planning with the important transportation component represented by access to the Long Island Rail Road, parking opportunities, important adjacent uses, the need to consider alternative traffic routes, and integration of amenities for pedestrians and bicyclists. The Study Area was modified once again to include the historic area along 2nd Street due to its importance and contribution to the downtown.

Out of the 577 parcels included in the BOA Study Area, residential use is the most prevalent. There are 224 parcels developed with single family residences, which covers the largest area of approximately 79 acres. While there are fewer parcels dedicated to commercial use (102 parcels), the area used as commercial space is not much less than is dedicated to residential use (commercial parcels occupy approximately 73 acres in the BOA Study Area). Commercial parcels provide various retail, service and dining opportunities for residents and visitors. Open space accounts for 16 parcels and approximately 51 acres within the Study Area, while the parks and recreation land use occupy 3 parcels totaling 10 acres. Multi-family uses, including apartment buildings and mobile homes, occupy 11 parcels on 29 acres of land. Institutional uses include numerous buildings used by the Town of Riverhead and Suffolk County Courts. There are 14 institutional parcels totaling 20 acres of land area. A large amount of parcels (78) and land (29 acres) is developed with multiuse purposes in the BOA. Office space occupies 30 parcels and approximately 23 acres. There are 34 vacant parcels containing a significant amount of land totaling over 37 acres. Transportation uses consisting of roads and parking lots (as well as area within right of ways) accounts for 37 parcels nearly 37 acres. There are some industrial uses in Riverhead which occupy 5 parcels on 9 acres. Utilities occupy 10 parcels and nearly 10 acres. A unique land use located in the Study Area are former duck farms. There are 8 parcels and over 50 acres of land which fall into this category. Finally, there are 5 parcels on just over 2 acres dedicated to cultural use.

Existing land use is illustrated on **Figures 3-1A** thru **3-1D** (for each of the subareas west to east). The western subarea extends from the western Study Area boundary east to Mill Road and the existing land use includes a mix of residential homes, including a mobile home community, as well as vacant properties, open space, and a variety of commercial and light industrial uses fronting on West Main Street. This western subarea is largely rural in character and contains several properties owned by the County or Town including a small park with trail access to the river and associated off-street parking area. Additionally, this subarea contains two former duck farm properties, auto repair shops, construction equipment rental facilities, a motel and inn, a deli, and the US Postal Office. The surrounding land uses consist of Lakewood Trailer Park, Dollar Storage, and I-495 Interchange to the west; Tanger Outlet Mall, Hotel Indigo, Fairfield Pines apartments, railroad tracks, senior housing, Riverhead scrap metal and parts, private equestrian use, Cubesmart Self Storage, and Riverhead Building Supply distribution center to the north; the Peconic River and vacant wooded area to the south; and Stone Center of Riverhead, LIPA property, and the central subarea to the east.

In July of 2015, an inventory of vacant buildings was completed within the Study Area, focusing primarily on Route 25 to provide an update to an earlier inventory. In the western subarea, five vacant buildings were identified consisting of three commercial properties, one residential property, and one building on the property of the former duck farm. The vacant commercial buildings include a former lumberyard just west of the Long Island Rail Road crossing at Route 25, Basso Motors at the intersection of Kroemer Avenue and Route 25, and warehouse/office space slightly east of the Kroemer Avenue and Route 25 intersection. The vacant building on the former duck farm property appears to be a house located at the intersection of Forge Road and Route 25. Another vacant residence is located on the south side of West Main Street west of Mill Road.

Existing zoning in the area is illustrated on **Figure 3-2**. The western subarea has a zoning designation of Riverfront Corridor (RFC) which includes permitted uses of one-family dwellings, river-related retail, and non-motorized open space recreation. The western subarea is also located within a "Recreational River" area of a designated NYSDEC Wild, Scenic & Recreation River Corridor (WSRR), which prevents any new commercial development (with the exception of river-related retail). There is a significant amount of nonconforming commercial development along West Main Street which was developed prior to the establishment of the area as a NYS Recreational River Corridor.



Town of Riverhead
Peconic River/Rt. 25 Corridor

NYS BOA Step II Nomination

FIGURE 3-1A

Land Use - Western Subarea

Legend

- BOA Boundary
- Vacant Buildings 2015
- Sub Area Boundary

Land Use

- Commercial
- Multiuse
- Cultural
- Former Duck Farm
- Industrial
- Institutional
- Office
- Open Space
- Parks and Recreation
- Residential
- Multi-Family (includes mobile homes)
- Transportation (Roads/Parking)
- Utilities
- Vacant

Sources: Suffolk County Real Property, 2013; NYSGIS Orthoimagery Program, 2013

1 inch = 800 feet

0 800 1,600 Feet

Town of Riverhead
Peconic River/Rt. 25 Corridor

NYS BOA Step II Nomination

FIGURE 3-1B

Land Use - Central Subarea

Legend

- BOA Boundary
- Vacant Buildings 2015
- Sub Area Boundary

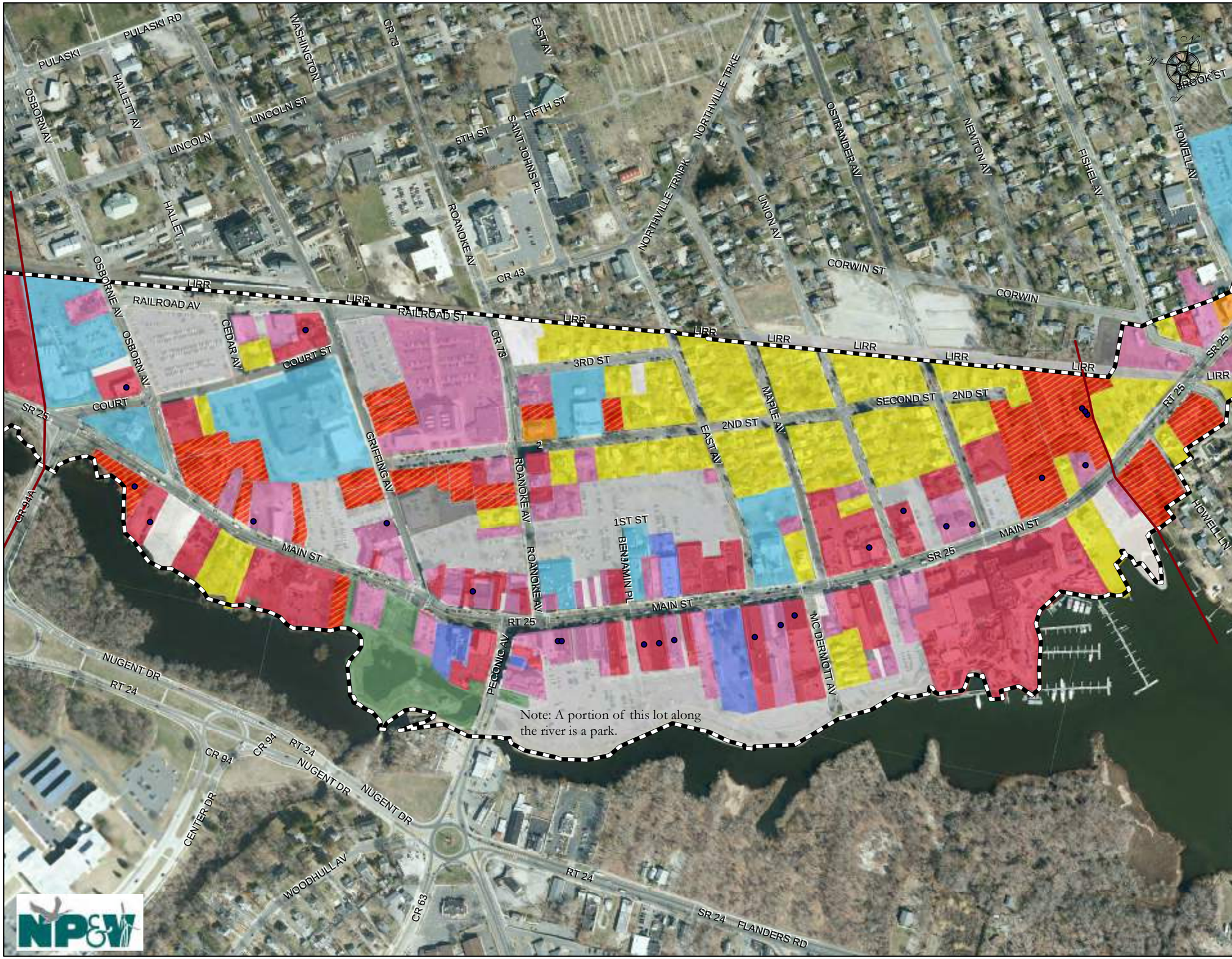
Land Use

- Commercial
- Multiuse
- Cultural
- Former Duck Farm
- Industrial
- Institutional
- Office
- Open Space
- Parks and Recreation
- Residential
- Multi-Family (includes mobile homes)
- Transportation (Roads/Parking)
- Utilities
- Vacant

Sources: Suffolk County Real Property, 2013; NYSGIS Orthoimagery Program, 2013

1 inch = 450 feet

0 450 900 Feet



Town of Riverhead
Peconic River/Rt. 25 Corridor

NYS BOA Step II Nomination

FIGURE 3-1C
Land Use - Downtown Subarea

Legend

- BOA Boundary
- Sub-Area
- Vacant Buildings 2015

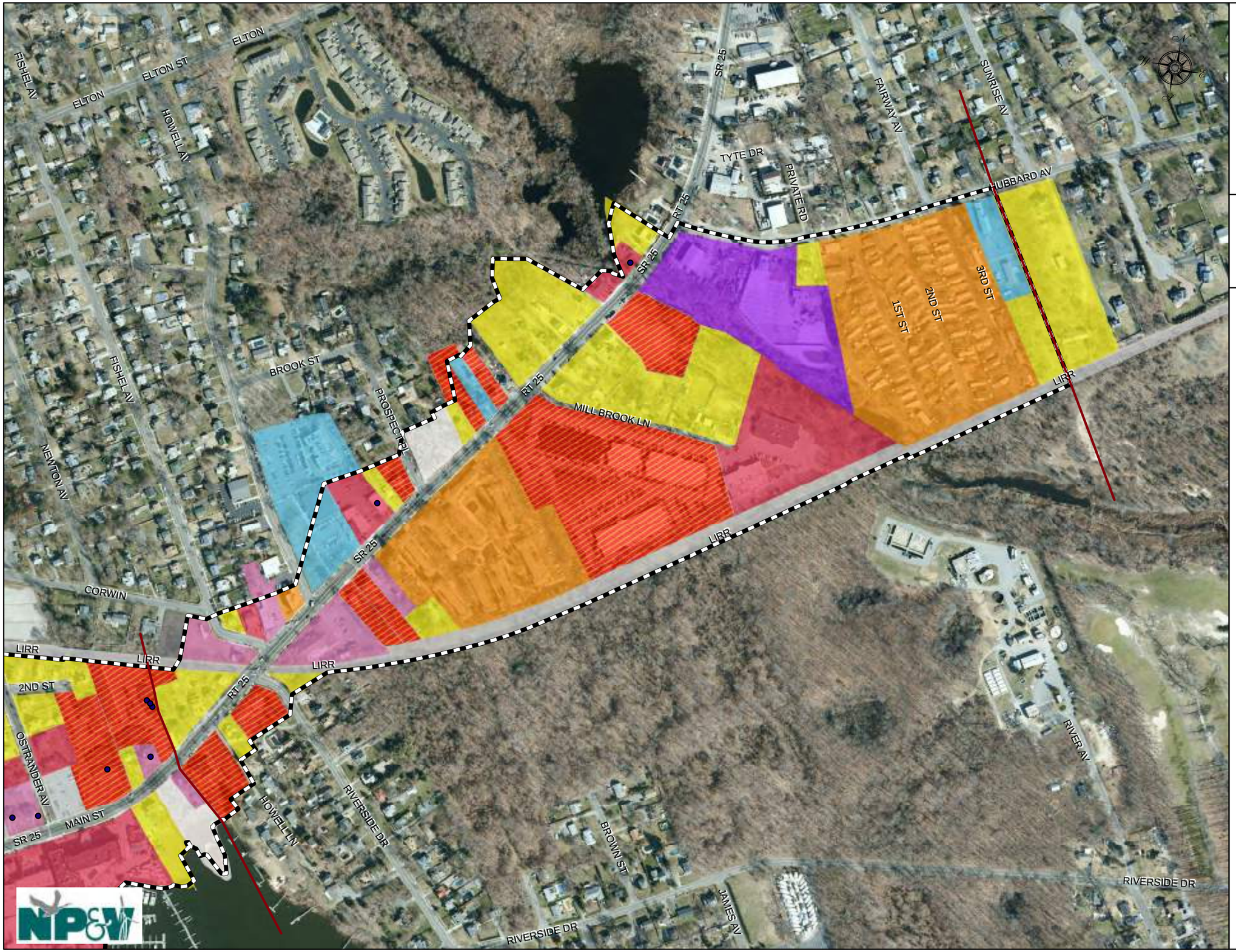
Land Use

- Commercial
- Multiuse
- Cultural
- Former Duck Farm
- Industrial
- Institutional
- Office
- Open Space
- Parks and Recreation
- Residential
- Multi-Family (includes mobile homes)
- Transportation (Roads/Parking)
- Utilities
- Vacant

Sources: Suffolk County Real Property, 2013; NYSGIS Orthoimagery Program, 2013

1 inch = 350 feet

0 350 700 Feet



Town of Riverhead
Peconic River/Rt. 25 Corridor

NYS BOA Step II Nomination

FIGURE 3-1D
Land Use - Eastern Subarea

Legend

- BOA Boundary
- Sub Area Boundary
- Vacant Buildings 2015

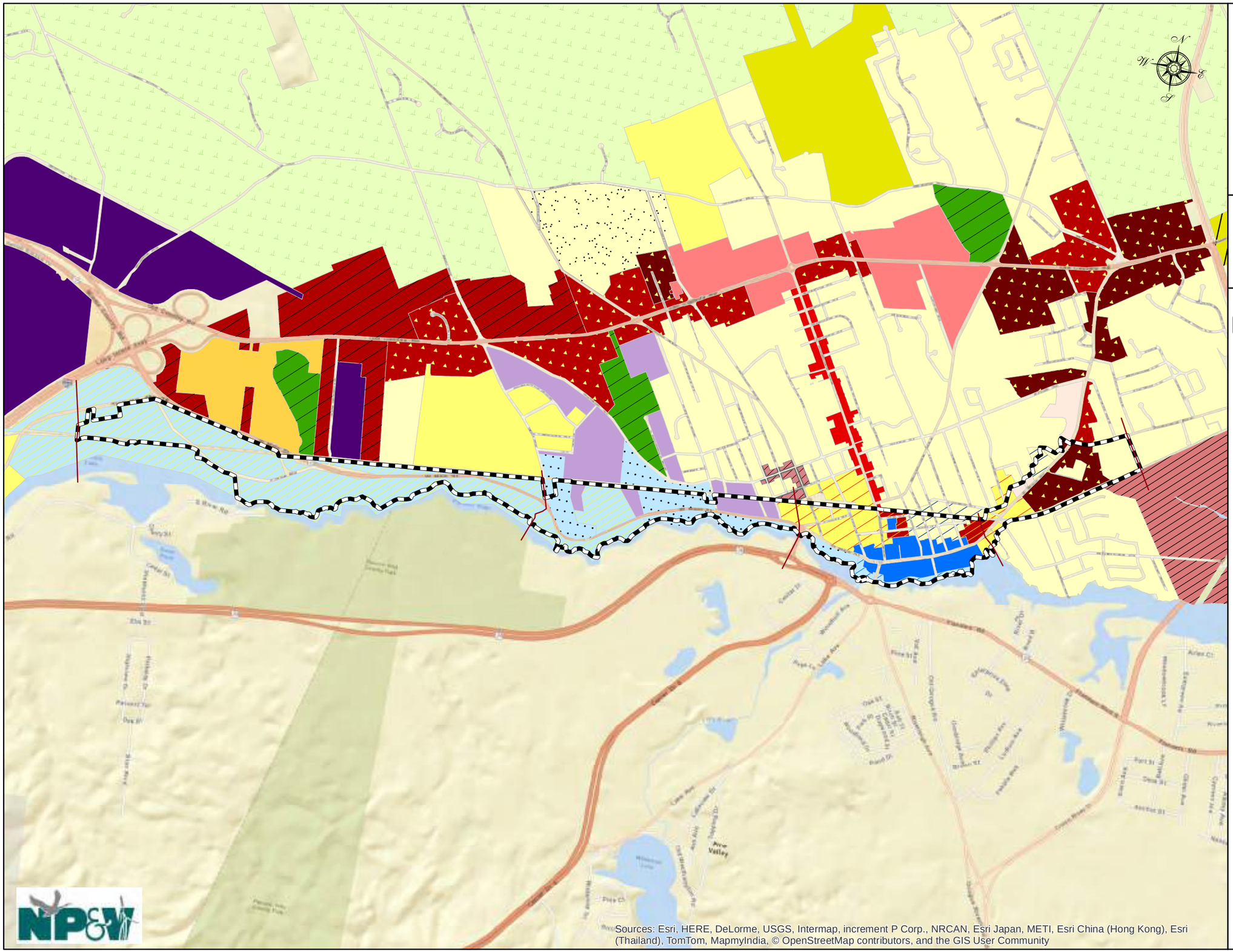
Land Use

- Commercial
- Multiuse
- Cultural
- Former Duck Farm
- Industrial
- Institutional
- Office
- Open Space
- Parks and Recreation
- Residential
- Multi-Family (includes mobile homes)
- Transportation (Roads/Parking)
- Utilities
- Vacant

Sources: Suffolk County Real Property, 2013; NYSGIS Orthoimagery Program, 2010

1 inch = 350 feet

0 350 700 Feet



Town of Riverhead
Peconic River/Rt. 25 Corridor

NYS BOA Step II Nomination

FIGURE 3-2

Zoning Map

Legend

- BOA Boundary
- Sub Areas
- (APZ) Agricultural Protection
- (BC) Business Center
- (BUS F) Business F
- (BUS PB) Professional Business
- (CRC) Commercial/Residential Campus
- (DC-1) Main Street
- (DC-2) Waterfront
- (DC-3) Office
- (DC-4) Office/Residential Transition
- (DC-5) Residential
- (DRC) Destination Retail Center
- (HC) Hamlet Center
- (HR) Hamlet Residential
- (Ind A) Industrial A
- (Ind C) Industrial C
- (OSC) Open Space Conservation
- (PRC) Peconic River Community
- (RA40) Residence A-40
- (RB40) Residence B-40
- (RC) Residence RC
- (RFC) Riverfront Corridor
- (RLC) Rural Corridor
- (SC) Shopping Center
- (TRC) Tourism/Resort Campus
- (VC) Village Center

Sources: ESRI WMS; Town of Riverhead

1 inch = 2,000 feet

0 2,000 4,000 Feet

The central subarea extends from east of Mill Road to the Nugent Drive/CR-94 intersection. Land use within this area is illustrated on **Figure 3-1B**. The western portion of this subarea contains a mix of commercial uses including restaurants, car repair shops, retail, and service businesses. Moving east along West Main Street, the density of development gradually decreases into mostly single family residential homes. The eastern portion of the subarea is considered a gateway into downtown Riverhead and contains a mix of residential uses, auto related uses, a gallery, sign shop and riverfront restaurant. The surrounding land uses include the Stone Center of Riverhead and the western subarea to the west; railroad tracks, Riverhead Building Supply Corp., Stotzky Park, Riverhead Water District water tower, Riverhead Polish Hall, and St. Isidore R.C. Church to the north; the Peconic River and a vacant wooded area along the south side of the Peconic River to the south; and the downtown subarea to the east. Within the central subarea, there were three vacant buildings identified in the July 2015 inventory. All three of the buildings are zoned for commercial purposes. Previous uses for the vacant buildings include a fish market and AmeriGas building on the south side of West Main Street, and former transmission (auto) repair on the northwest corner of West Main Street and Sweezy Avenue.

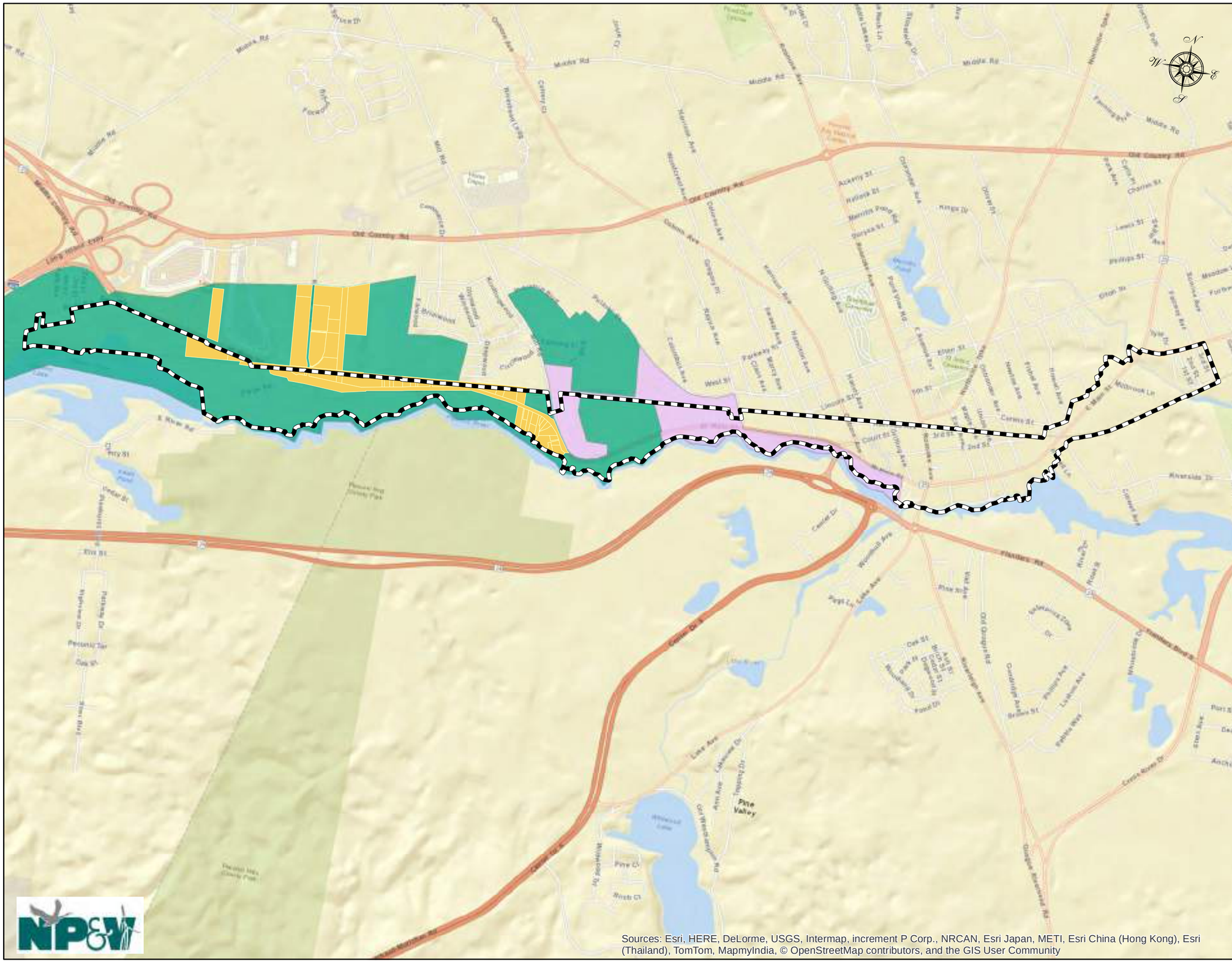
The zoning designations of the central subarea are Riverfront Corridor (RFC), Peconic River Community (PRC), Industrial C (Ind-C), and Office (DC-3). The RFC district limits permitted uses to single family homes, river-related retail, and non-motorized open space recreation. The PRC district allows a variety of land uses including retail, wholesale businesses, offices, restaurants, parks/playgrounds, and institutional uses; the PRC district prohibits industrial uses, dry-cleaning, and motor vehicle sales. In the Ind-C district, a variety of offices, warehouses, wholesalers, greenhouses, laboratories, commercial sports, and recreation facilities are allowed, while the prohibited uses include professional or municipal offices, outdoor storage, and residential uses. The DC-3 district contains numerous permitted uses including retail, banks, personal services, funeral homes, art galleries, museums, libraries, aquariums, restaurants, cafes, bakeries, specialty food, ice-cream shops, theaters, offices for professional and government uses, schools, places of worship, townhouses, and parking facilities. The prohibited uses in the DC-3 district include gas stations, car washes, and drive-thru windows. There appear to be nonconforming uses in this subarea, including the residential uses along Sweezy Ave in the Ind-C district and pre-existing uses in the RFC district. Additionally, the western portion of the subarea is located within the “Recreational” area of the WSRR and some of the eastern portion is in the “Community” area.

The downtown subarea is located between Nugent Drive/Cr-94 and Howell Drive and contains a mix of cultural, commercial, office, and institutional uses, see **Figure 3-1C**. The northwest portion of the subarea includes offices, the public library, historic museum, residences, small retail, and institutional uses such as the Suffolk County Court parking for the railroad and courts. The northeast portion is predominantly developed with residential uses and the downtown area includes restaurants, retail, offices, apartments, the Suffolk County Community College Culinary Center, as well as attractions such as the riverfront park, Grangebel Park, Long Island Aquarium and Suffolk Theatre. The surrounding land uses include the central subarea to the west; railroad tracks, Polish Town Civic Association, Cornell Cooperative Extension of Suffolk County, Railroad Museum, Roanoke Avenue Elementary School, Riverhead Fire Department, and residential homes to the north; the Peconic River, vacant wooded land, Suffolk County Offices and Jail, and limited commercial and residential uses to the south; and the eastern subarea to the east.

In the downtown area, the 2015 inventory of vacant buildings included the streets surrounding the Riverhead LIRR Train Station, including Court Street, Griffing Avenue, Railroad Avenue, Cedar Street, and Roanoke Avenue in addition to properties fronting on West and East Main Street. The downtown subarea contained the majority of vacant buildings identified in the inventory (24 out of a total of 33). Out of the vacant downtown buildings 10 are commercial, 9 are considered multiuse, and 5 are office spaces. This can be compared to a vacant buildings inventory completed by the Town in 2010 which focused primarily on Main Street from Osborn Avenue to Ostrander Avenue in the downtown area. The 2010 inventory has been compared to the 2015 inventory to determine which buildings have remained vacant, where new vacancies are occurring, and which areas have started to develop. At the time of the 2010 inventory there were 22 vacant buildings in the area. Out of these 22 vacant buildings, 9 were still vacant at the time of the 2015 inventory, 12 were no longer vacant (and 1 was not updated in the 2015 inventory). Many of the buildings that were vacant in 2010 but occupied in 2015 are located on Main Street between Roanoke Avenue and East Avenue emphasizing the recent successes that are occurring in downtown Riverhead, particularly along East Main Street.

As in the central subarea, the downtown area also contains the DC-3 and PRC zoning designation and the majority of properties within the PRC zone have been developed with conforming uses. The downtown subarea also contains the Main Street (DC-1), Waterfront (DC-2), Office/Residential Transition (DC-4) and Residential (DC-5) zoning designations. The Main Street (DC-1) district allows retail, banks, personal services, indoor public markets, art galleries, museums, libraries, aquariums, restaurants, cafes, bakeries, specialty foods, ice-cream shops, theaters, professional offices, residential units on upper floors, B&Bs, and townhouses. The prohibited uses include office buildings only, flea markets, gas stations, car washes, and drive-thru windows. The D-2 district allows marinas, resorts, and retail stores, while hotels, inns, B&Bs, and indoor recreations are allowed by special permit. The DC-4 district includes permitted uses such as professional and public offices, single family units, townhouses, places of worship, and funereal homes, while retail and personal services are prohibited. Professional offices, B&Bs, day care, and nursery schools are allowed by special permit. Portions of the downtown subarea contain numerous special districts including a small portion in the "Community" area of the WSRR (**Figure 3-3**), Business Improvement District (BID) (**Figure 3-4**), two sections of Urban Renewal Areas including the EMSURA (**Figure 3-5A)** and the Railroad Street Urban Renewal Area (**Figure 3-5B**), the Historic Districts (**Figure 3-6**), Arts District (**Figure 3-7**), and Parking District (**Figure 3-8**).

The eastern subarea is located east of Howell Avenue and extends to the BOA's eastern boundary. This area is predominantly residential in character and includes a multifamily housing complex, offices, retail, service uses, and institutional uses along Main Street and one industrial use and a mobile home park on Hubbard Avenue. The surrounding land uses include the downtown subarea to the west; single family homes and vacant wooded areas to the north; railroad tracks, Peconic Bay, a sewage treatment plant, and golf course to the south/southeast; and single family residential and Suffolk County property/former duck farm to the east. In the eastern subarea, there are two vacant commercial properties on the north side of East Main Street.



Town of Riverhead
Peconic River/Rt. 25 Corridor

NYS BOA Step II Nomination

FIGURE 3-3
Wild, Scenic & Recreational River Corridor Designations

Legend

- BOA Boundary

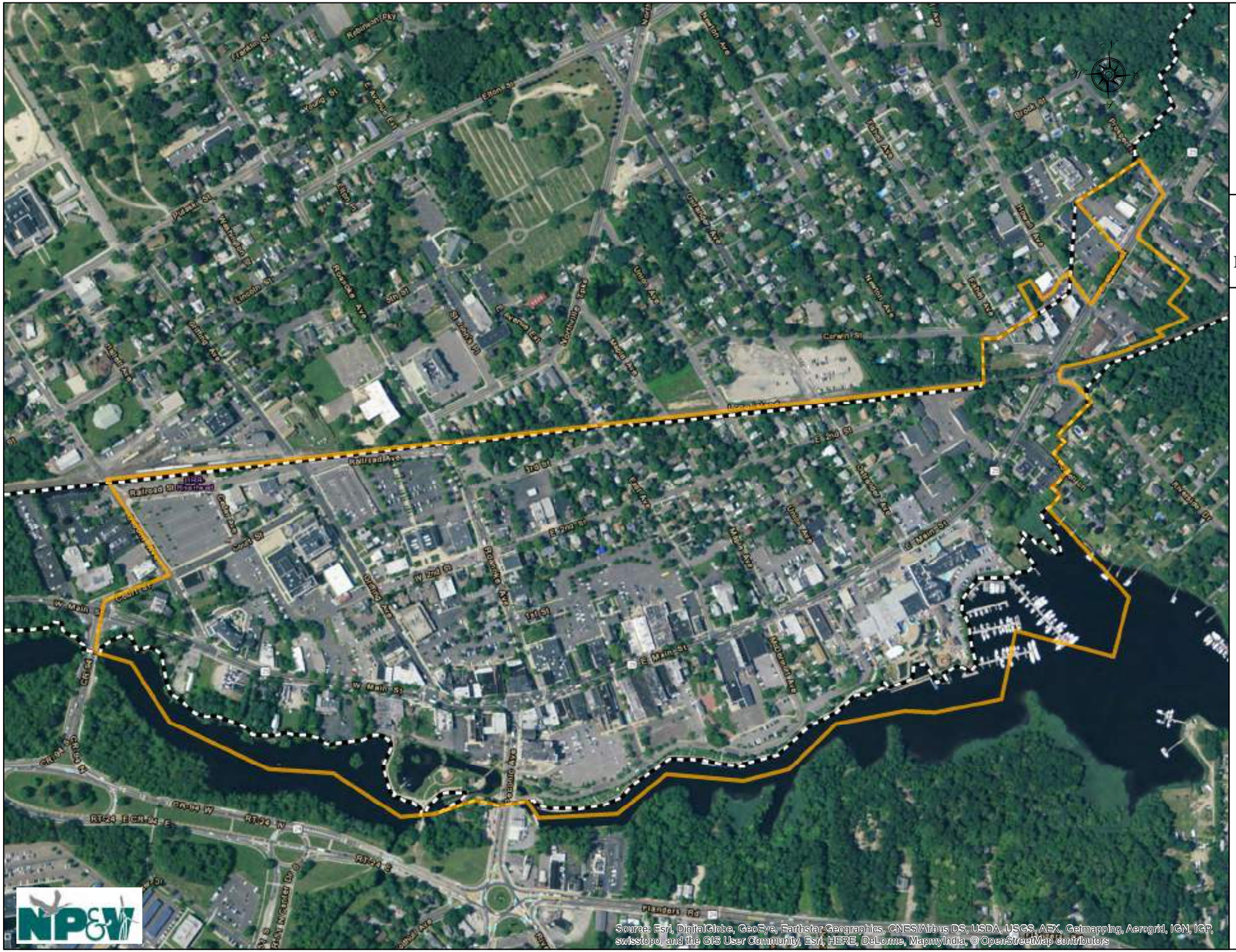
WSRR CORRIDOR

- Community
- Recreation
- Proposed Community Parcels

Sources: ESRI WMS; NYSDEC

1 inch = 1,800 feet

0 2,000 4,000 Feet



Town of Riverhead
Peconic River/Rt. 25 Corridor

NYS BOA Step II Nomination

FIGURE 3-4

Business Improvement District

Legend

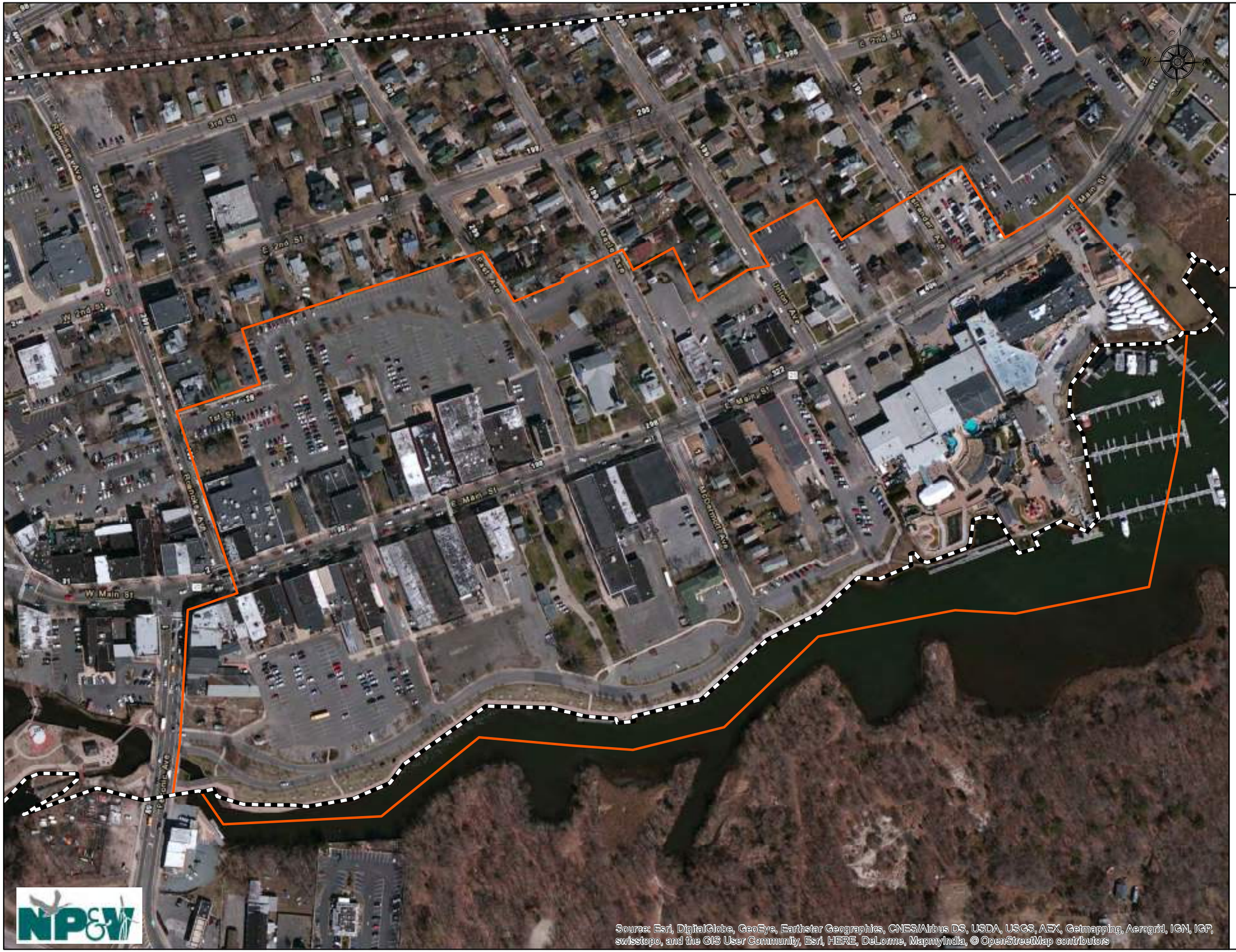
BOA Boundary

Bid District Boundary

Sources: ESRI WMS; Riverhead GIS Data

1 inch = 400 feet

0 400 800 Feet



Town of Riverhead
Peconic River/Rt. 25 Corridor

NYS BOA Step II Nomination

FIGURE 3-5A
East Main Street Urban Renewal Area

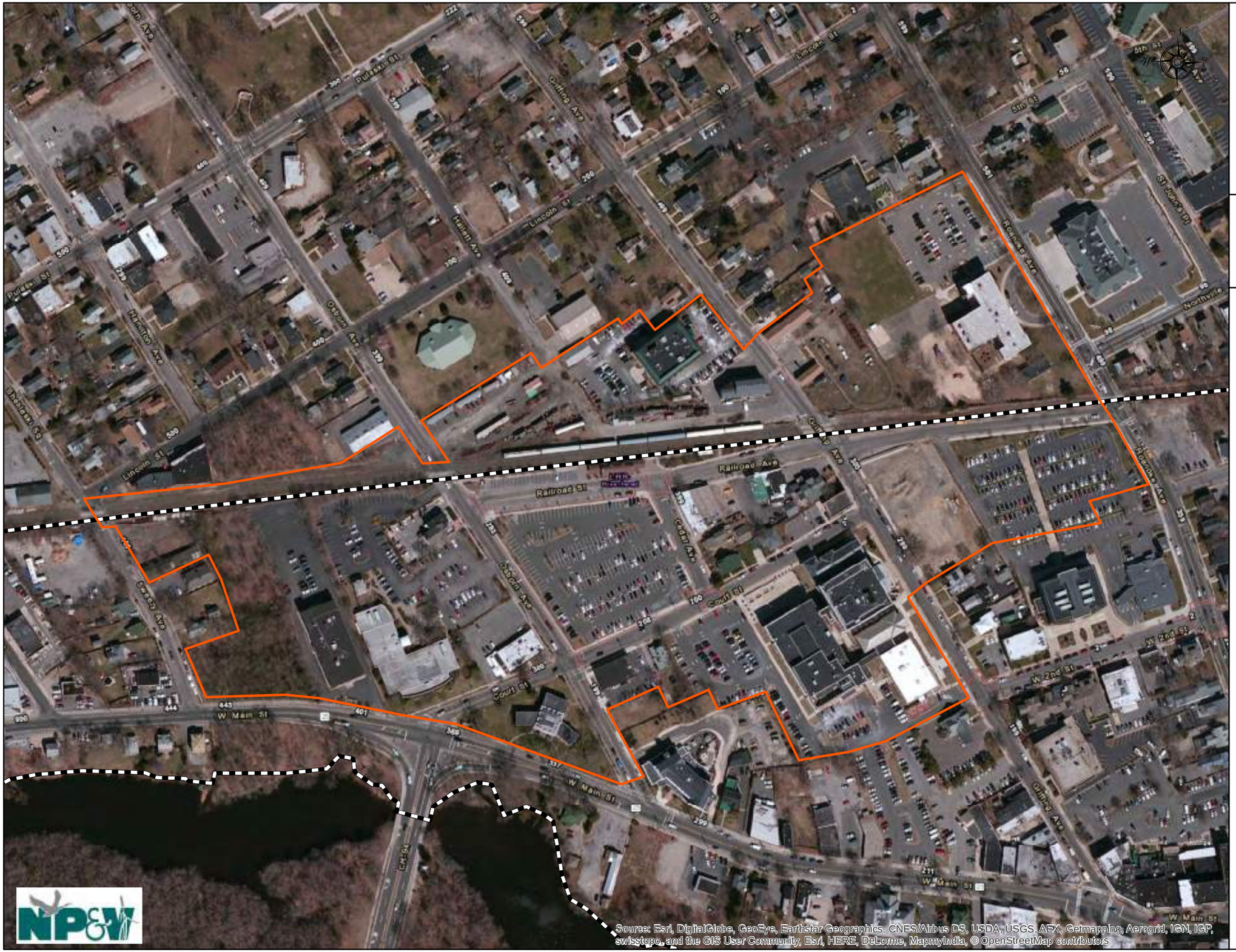
Legend

- BOA Boundary
- EMSURA

Sources: ESRI WMS; Riverhead GIS Data

1 inch = 200 feet

0 200 400 Feet



Town of Riverhead
Peconic River/Rt. 25 Corridor

NYS BOA Step II Nomination

FIGURE 3-5B
Railroad Street Urban Renewal Area

Legend

BOA Boundary

Railroad Street Urban Renewal Area

Sources: ESRI WMS; Riverhead GIS Data

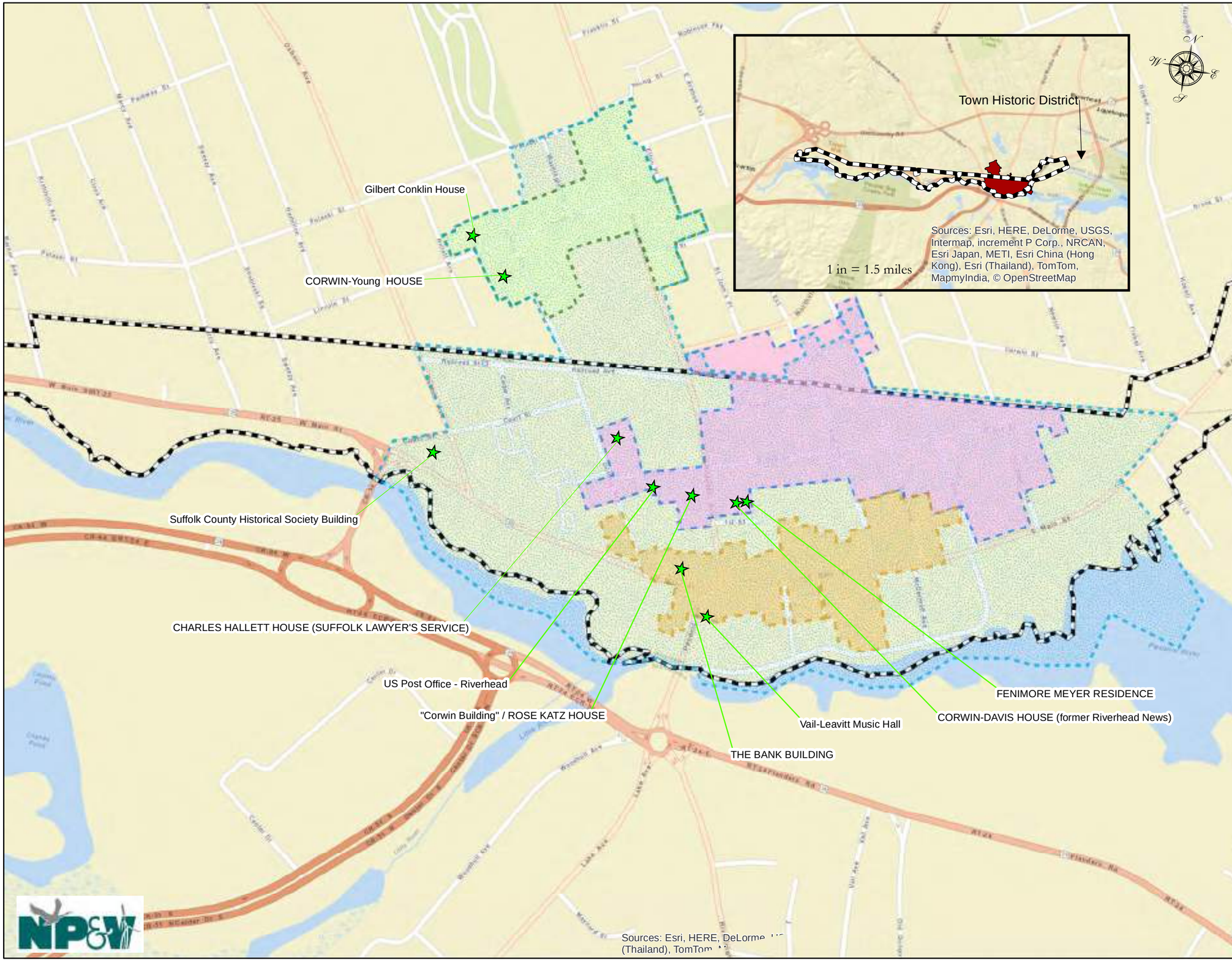
1 inch = 200 feet

0 200 400 Feet

Town of Riverhead
Peconic River/Rt. 25 Corridor

NYS BOA Step II Nomination

FIGURE 3-6
Historic Districts and Cultural Features Map



Legend

- BOA Boundary
- Cultural and Historic Sites
- Town Historic District

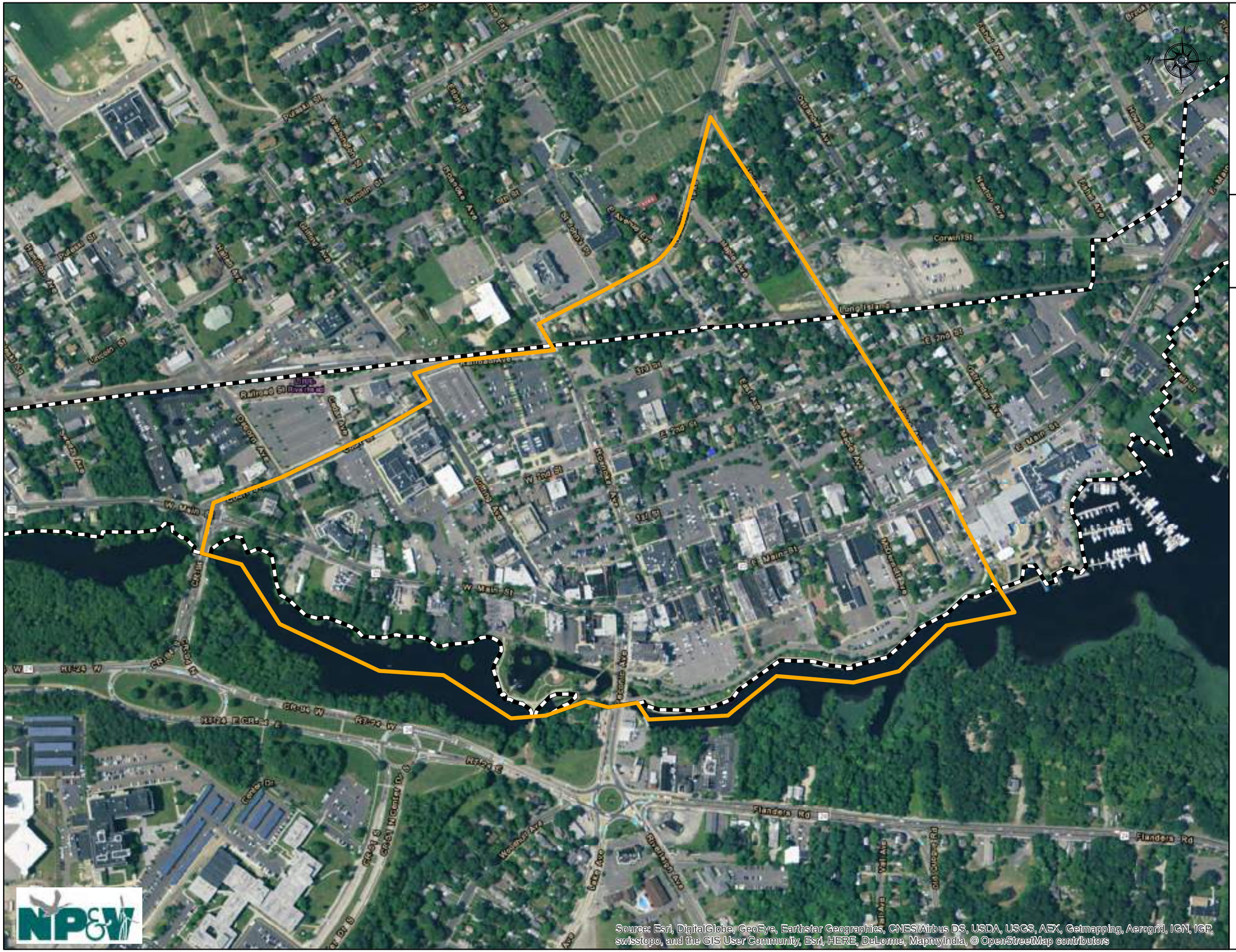
Existing & Potential National Register Districts

- Main Street National Historic District
- Potential Upper Griffing-Roanoke NR Dist.
- Recommended 2nd Street NR District

Source: ESRI Base Aerial; Town of Riverhead

1 inch = 500 feet

0 500 1,000 Feet



Town of Riverhead
Peconic River/Rt. 25 Corridor

NYS BOA Step II Nomination

FIGURE 3-7

Arts District

Legend

BOA Boundary

Arts District

Sources: ESRI WMS; Riverhead GIS Data

1 inch = 400 feet

0 400 800 Feet

Town of Riverhead
Peconic River/Rt. 25 Corridor

NYS BOA Step II
Nomination

FIGURE 3-8

Parking District

Legend

BOA Boundary

Parking District

Sources: ESRI WMS; Riverhead GIS Data

1 inch = 300 feet

0 300 600 Feet

The zoning in the eastern subarea includes Office (DC-3), Office/Residential Transition (DC-4) and Residential (DC-5) which are found in the downtown subarea as well as the Hamlet Center (HC), Commercial/Residential Campus (CRC), and Residence A-40 (RA-40) zoning districts. The HC district includes permitted uses such as retail stores, art galleries, antique stores, personal service, specialty food stores, wine shops, bakeries, restaurants, cafes, banquets, ice-cream parlors, offices, professional offices, museums, libraries, schools, places of worship, apartments on upper floors, one family units on min. 80,000 SF lots. The prohibited uses include two-family units, townhouses, single retail stores greater than 10,000 SF, convenience stores, gas stations, and ground floor residences. The CRC allows numerous uses including offices, banks, restaurants, funeral homes , single and two family units, townhouses, garden apartments, radio and TV broadcast studios, schools, museums, art galleries, meeting rooms, places or worships, parks/playgrounds, indoor sports, and recreation facilities. The RA-40 district includes one family units, parks and playgrounds, and attached single family homes within a cluster subdivision as permitted uses and two-family units with TDR, overhead power transmission/distribution lines greater than 13KV, day care or nurseries in residence, and home occupation with an accessory building by special permit. Portions of this subarea are also located in the Business Improvement District.

Table 3-2 provides a summary of land use for the Study Area (number of parcels and total acres by land use). An analysis of land use and zoning by subarea is provided in the following sections.

TABLE 3-2
EXISTING LAND USE

Land Use	Number of Parcels	Area (acres)
Commercial	102	72.71
Cultural	5	2.22
Former Duck Farm	8	50.69
Industrial	5	9.07
Institutional	14	20.09
Multi-Family (includes mobile homes)	11	29.01
Multiuse	78	22
Office	30	22.9
Open Space	16	51.21
Parks and Recreation	3	10.07
Residential	224	79.38
Transportation	37	36.91
Utilities	10	9.88
Vacant	34	37.57
Total	577	453.71*

*Note that total area does not include all areas within roads and ROWs.

Western Subarea

In the western subarea, many of the existing developed properties do not conform to current zoning regulations. The area contains a mobile home park on Forge Road, which does not comply with the current area requirements for residential use within the zone. In addition, there are number of pre-existing nonconforming commercial uses along West Main Street. Limited refinements to the code may be necessary to promote beneficial commercial redevelopment that is compatible with river protection goals and Town planning goals for this area.

Currently, the western subarea includes the DEC WSRR designation of "Recreational," which prevents any new commercial development, except for river-related retail. A modification of the WSRR designation from "Recreational" to "Community" river designation was recommended in 2014, because it would allow for some redevelopment on existing developed sites where currently there is no economic incentive to do so. The Town previously prepared and submitted an application to the DEC for a change in designation for the entire WSRR area, although only a portion of the area within the central subarea and downtown areas was approved (in January 2010) to be changed to the "Community" river designation. There is potential for a new "Community" area designation for a portion on the north side of NYS Route 25 (and limited parcels on the south side in the Central Subarea). NP&V prepared the analysis to support the change in designation and an application was submitted to the NYSDEC by the Town of Riverhead for a new "Community" designation in October 2014 with a modified application submitted to reflect DEC staff comments in early April 2016 (see application packages in **Appendix B-1 and B-2**). As proposed, the WSRR "Recreational" designation will remain in a large portion of the subarea, even if the application for "Community" designation is successful. **Figure 3-3** illustrates the current and proposed WSRR Area Designations. With favorable review of the application for the new "Community" designation, those properties now zoned RFC within the new "Community" designation would need to be rezoned to PRC (Peconic River Corridor) by the Town of Riverhead. Land use in the "Recreational" area will remain restricted to low density residential (including B&Bs[8]), river-related retail, and non-motorized recreation.

There are several opportunities where changes in land use would have a positive impact on the community. These concepts are summarized below and are included in the alternative redevelopment scenarios which are presented in **Section 4.0**.

Within the western subarea there are two sites which provide opportunities for transient lodging (B&B, small inn, or campgrounds). One site is a former duck farm located on the south side of West Main Street opposite Kroemer Avenue. The property is approximately 16 acres in size, is currently overgrown and contains at least one abandoned structure visible from the road. Since the property is not within the recommended Community area of the WSRR, the property's use will still be limited; however, transient lodging is permissible within the Recreational designation of the WSRR. Another potential transient lodging site is on the former Olin Duck Farm on River Road. The 84 Lumber site provides a gateway opportunity, which could provide a location for a visitor center with related services. Such a facility could include use of the

[8] B&B's would likely be approved by the DEC although not expressly permitted - based upon discussion with NYSDEC Bureau of Habitat.

existing rail siding on the property for a shuttle train in the future between downtown Riverhead and the visitor center and could be achievable with the new WSRR Community designation.

Central Subarea

The central part subarea includes a mix of uses, some of which are appropriate and conform to the intent of the zoning, though many developed properties appear to be nonconforming. Existing commercial development within the Riverfront Corridor (RFC) zone of this subarea are located along West Main Street (such as Buoy One Seafood Market and Restaurant, Old Riverhead Muffler, and others) are pre-existing uses which do not conform to current zoning or the WSRR regulations. In the Industrial C zoning district, the existing residential structure along the west side of Sweezy Avenue appears to be a nonconforming use. Within this subarea is Blackman Plumbing, which has a small shop and showroom on the north side of West Main Street. Blackman received site plan approval for an expanded showroom, on the subject property and vacant properties to the east - which has not been implemented although approved a number of years ago.

Within the western portion of this subarea, there are a few sites on the river which are already developed with commercial (generally automotive related) uses. These sites were included in the recommended "Community" area which will encourage redevelopment of this area with more compatible uses in conjunction with river oriented commercial activity and tourist interests. The remaining properties recommended for inclusion in the proposed "Community" area are located on the north side of West Main Street, or are located north of the railroad tracks.

Towards the eastern portion of this subarea, a positive transformation has begun in recent years which includes the revitalization of a former commercial property on the river which is now a gallery/architect's office. Another example is the reuse of existing structures on the south side of West Main and creation of a popular restaurant which provides outdoor seating on the Peconic River. These types of uses are appropriate for this transitional area leading into the downtown and should continue to be encouraged as they act as catalysts for redevelopment in the surrounding area. It is the case that many properties on the south side of West Main Street in this area require creative solutions to promote redevelopment and revitalization (for example where property depths do not allow for off street parking). In the absence of creative planning solutions, similar properties are likely to continue to remain vacant eyesores along the riverfront. There are numerous examples of structures that have been boarded up for over 5 years and continue to deteriorate. Providing incentives or appropriate relief to property owners within this portion of the corridor will encourage reuse and revitalization of these properties.

Downtown Subarea

The downtown subarea contains a mix of commercial, office, institutional, residential, and cultural uses that are consistent with a traditional downtown area. Until recently, there were few apartment units in the downtown; a necessary ingredient for a successful downtown. Since this study began, two successful mixed use buildings containing apartments have been constructed and are now occupied. The residents of these buildings now frequent the area businesses, enjoy the convenience of living in a walkable area and help to create 24 hour activity in town.

A small portion of the downtown subarea (located west of Peconic Avenue and along the south side of West Main Street) is located within the WSRR "Community" designated area. Zoning was amended previously to PRC and is compatible with the regulations of the WSRR designation. This subarea also contains a BID which encompasses mainly the downtown area east of Nugent Drive and west of Prospect Place. All properties located within the BID, except for primarily residential properties, are additionally taxed which allows financing of certain improvements and services for the benefit of the businesses located within the district such as street beautification, special holiday lightings, and other programs that encourage an increased customer base. There are two Urban Renewal Areas, the Railroad Urban Renewal Area and the East Main Street Urban Renewal Area (EMSURA), located in this subarea. Several Urban Renewal projects have been completed, including the aquarium and conference center, and one is underway; however the blocks on either side of Griffing Avenue appear to be underutilized and would benefit from more organized development.

The majority of Downtown Riverhead is located within the Town's Historic District and there are also several buildings located within the downtown that are listed on the National and State Register of Historic Places. In 2012, a National Register Historic District was created which included properties on both sides of West Main Street between Griffing Avenue and Maple Avenue. In addition, as part of the BOA Study, NP&V and affiliated firm of architects, Hawkins, Webb & Jaeger, completed an inventory to document homes and evaluate for status as contributing for a new National Register District for the residential area along and near to 2nd Street. The inventory was completed in early 2015 and the application to SHPO will be submitted by the Town of Riverhead Landmark Preservation Commission. The product is provided in **Appendix C.**

A portion of the Downtown Riverhead business district has been designated as an Arts District (see **Figure 3-7**) in order to provide an arena for the creation of arts and cultural resources together with living accommodations for artists[9]. Additionally, the majority of the downtown is located within the Parking District, which requires properties to pay an additional tax but eliminates the requirements for providing off-street parking.

There is both the need and desire to create a more vibrant downtown. By utilizing eyes-on-the-street principles and providing a greater mix of residential and commercial uses in the downtown area, activity will increase and foot traffic will increase resulting in a livelier downtown. Despite the many recent successes enjoyed by the Town of Riverhead, one of the factors still hindering revitalization efforts is the high number of vacant buildings in the downtown. Many second and third story spaces have lost and continue to lose retail and office tenants and such unused floor space could be used for residential uses as there is currently a need for additional residential

[9] Section 108 of Town Code provides Legislative Intent for the Arts District, stating *"It is further found and declared that the second and third story space have lost and continue to lose retail and office tenants to more modern structures more conveniently situated and that the unused floor space of such buildings constitute a potential housing stock. It is further found and declared that residential uses within the Central Business District contribute to the viability of such Business District and that the provision of an arena for the creation of art and cultural resources, together with living accommodations for artists, would create a unique environment for increased investment contributing to the revitalization of the district. It is further found and declared that the legislation governing the alteration of such buildings to accommodate residential use must be more restrictive that statutes heretofore in effect"*.

space. The provisions of the Arts District speak to this issue, in allowing galleries and artist studio space, with dwellings for artists as an accessory use. However, this provision is only part of the solution and the downtown will benefit most greatly with new construction or redevelopment of existing buildings with additional residential units. Currently, the downtown subarea contains the Main Street (DC-1) zoning district, which limits the number of residential units permitted to 500 units. Based upon discussions with Town planning staff, there was no empirical study conducted to justify the need or potential future demand for 500 residential units within the DC-1 district and it was noted that this was expected to be revisited in the future once 500 unit cap was met.[10] To date, considering the flexibility of the DC-1 District, relatively few redevelopment projects have occurred which include new residential units. However, the success of Summerwind (fully rented) and the former Woolworth apartments (currently renting) are expected to increase interest in new residential development. There is currently another site plan application pending for new artist housing on West Main Street on the property currently occupied by the LI Science Museum and news of a recent sale of a long vacant building with plans for mixed use.

As noted, the DC-1 district regulations are very flexible and favorable to advancing redevelopment. The zoning code does not contain development requirements for provision of civic space, common areas, on-site parking (none required within the parking district), affordable housing, LEED[11] related incentives or other typical planning elements of current downtown zoning type codes. It was determined that the current code provisions should be tested for consistency with the planning goals of the Town for the downtown area; and alternative code provisions be tested to determine if a change in the code provisions would be more consistent with Town goals. Thus, a full build-out development analysis for the DC-1 District was conducted as part of this Nomination[12]. The results of the full build-out development analysis[13] indicated the potential for over 1.8 million additional SF in the DC-1 district. Alternative development scenarios were also conducted with reduced bulk requirements and developed. The recommendations which evolved out of the build out analysis include reduced bulk requirements for the DC-1 District with varying bonus density criteria for community benefits and meeting sustainable building thresholds. It is noted that while the recommendations include a reduced Floor Area Ratio, density bonuses can be provided to achieve the full FAR of the current DC-1 District.

In addition, in the development of alternative development scenarios, the question as to whether 500 units can be accommodated within the DC-1 District area under current conditions was assessed[14]. As part of the build-out analysis, development potential outside of the DC-1 District was also assessed. For example, the development of the train station block is considered an ideal location for a mixed use development with a residential component. This analysis also included

[10] (The Town of Riverhead Comprehensive Plan included a build-out analysis for residential districts for Transfer of Development Rights (TDR) for the Agricultural Protection Zone (APZ) and concluded that 23,800 total units are possible under the existing zoning and 19,000 units are possible under the proposed zoning with implementation of the TDR Program).
[11] LEED is the acronym for the Leadership in Energy and Environmental Design green building rating systems developed by the US Green Building Council
[12] See **Appendix I**.
[13] See **Table 2** in **Appendix I**.
[14] Evaluated in **Appendix I**.

an assessment of a number of apartments that can be accommodated in alternative development scenario with reduced bulk requirements[15]. Based on this analysis, the recommendations (provided in the **Section 4.0)** include expanding the area within which the existing cap of 500 dwelling units applies, beyond the DC-1 District to surrounding areas to include the train station block. Finally the analysis contains an evaluation of a possible Transfer of Development Rights (TDR) Program which if implemented by the Town could result in the preservation of properties along West Main Street, with increased density within the downtown area and train station block. This would provide benefits with respect to the environment (in transferring development to an area with sewer infrastructure), increase number of residential units with access to transit and walkable to amenities and implementation of the greenbelt vision for the south side of West Main Street (as well as increased public access and views of the Peconic River).

Eastern Subarea

In the eastern subarea, most of the land use appears to be consistent with the provisions of the zoning districts found within the subarea; however there are a few examples of incompatible uses. A portion of this subarea is within the Business Improvement District.

The existing Gershow auto salvage yard along the south side of Hubbard Avenue is located within the Commercial/Residential Campus zoning district, and is inconsistent with the zoning regulations of this district. From a land use compatibility perspective, this use is also considered to be incompatible as it is located adjacent to residential homes and Sawmill Creek, which is a tributary to the Peconic Estuary. The towing business to the west of Gershow could be included in a redevelopment plan for multifamily use. The site was rezoned for Commercial/Residential Campus as recommended by the Comprehensive Plan in 2003; however, incentives for redevelopment may be appropriate. There is also an opportunity for redevelopment in the future of an existing automotive use situated on the north side of East Main Street, just west of the intersection of Hubbard Avenue. This property adjoins a small pond and would provide an attractive gateway feature and public amenity in an area where there are few recreational resources if acquired and redeveloped as a gateway park. The Town currently has an easement for access to the pond, however, this does not appear to be utilized by the public.

3.2.2 Brownfield, Abandoned and Vacant Sites

It is a fundamental purpose of this Study to identify potential vacant, underutilized and brownfield sites within the Study Area, for purposes of identifying properties with conditions that may be impeding development and redevelopment in the community. In many instances, a property may not itself be a brownfield, but has been abandoned or is vacant due to its proximity to a brownfield site and concerns with the potential liability and reduced marketability of being in close proximity to it. What is a brownfield? The term has been defined by various governmental agencies - the most common definitions, for purposes of this study, are those set forth by the U.S. Environmental Protection Agency (USEPA) and New York State Environmental Conservation Law. The USEPA defines a “brownfield” as follows:

[15] **Table 7** in **Appendix I** provides a summary of the total residential apartment units in Riverhead Downtown (DC-1 district and surrounding areas).

> ***"real property, the expansion, redevelopment, or reuse of which may be complicated by the presence or potential presence of a hazardous substance, pollutant, or contaminant".***

6 NYCRR Part 375 defines a brownfield as "*any real property where a contaminant is present at levels exceeding the soil cleanup objectives or other health-based or environmental standards, criteria or guidance adopted by the Department that are applicable based on the reasonably anticipated use of the property, in accordance with applicable regulations. Such term shall not include real property identified in subdivision 375-3.3(b)*[16]*."*

In either case, the key word is "contaminant". Examples of brownfields include gas stations, old manufacturing plants, and foundries. The problem with the presence of brownfields in a community is that they are often underutilized or abandoned, where property owners no longer are willing to maintain it or pay real property taxes. Along with the actual health hazards associated with these properties, they have other negative impacts on the community, such as negative visual impacts. Remediation of these sites can result in beneficial impacts, including the introduction of housing, creation of businesses and employment, improvement in real property values, increase in tax revenues, and revitalization of the overall community. The BOA Program assists the community in identification of these sites, offers incentives for their remediation, and establishes community-based preferences for redevelopment and reuse.

This Step II Nomination Study provides a basic and preliminary analysis of those areas or properties that may be affected by brownfield conditions. The actual presence of contaminants on any site identified in this Step II study, which have not been investigated, can be evaluated in the subsequent BOA step or independently via a Phase I Environmental Site Assessment (ESA). This Step II study included a review that identified sites that have known existing or prior contamination issues; or based upon past use information, could likely have contamination problems. A technical memorandum was prepared and provided to the Town of Riverhead which was utilized as a resource as the recommendations for redevelopment were developed. It is noted that the Town of Riverhead determined that the contents of this memorandum should be kept confidential and is thus not disclosed in this Step II Nomination Report.

A review of brownfield, vacant or underutilized properties was conducted to identify properties whose redevelopment could bring about positive change in the vicinity. The analysis considers the past and current use of a property, and takes into consideration whether or not the property is fully occupied or in full use. While a site may have or have had a contamination issue, the intent of the Study is to identify those particular sites which are underutilized or vacant as a result of a continuing or present condition and identify actions that may be taken to stimulate redevelopment.

It is important to note at the outset that while all properties were evaluated to some degree, only those properties which the community has deemed as "strategic" sites for purposes of revitalizing the neighborhood and effectuating change, are listed as potential BOA sites at the end of this section.

[16] Part 375 3.3b identifies sites that are ineligible under the NYS Brownfield Cleanup Program.

In order to identify potential of Brownfield sites, NP&V conducted an "area-wide" environmental assessment which identified past history of environmental contamination based upon federal, state and local databases. NP&V followed ASTM Standards as feasible to identify properties with a history of contamination. Through this assessment, several properties were identified where clean-up would likely be required to permit redevelopment. The findings of this assessment were described in the aforementioned Technical Memorandum. This research allowed NP&V to identify properties with potential contamination as well as to make an initial assessment of level the concern regarding level of contamination and potential constraints which may present major obstacles to redevelopment. Toxics Targeting[17] prepared an environmental database report for the BOA Study Area to assist in identifying properties where past environmental contamination could be a factor contributing to the abandonment of a property. Database listings for Federal and State agencies were reviewed and each listing was assessed to determine the potential presence of existing adverse environmental conditions. Adverse conditions consisted of existing releases, limited storage tank information, major storage facilities, facilities subject to regulatory action and facilities that produced a significant amount of hazardous waste.

Specifically, the Federal databases that were researched included the NPL site list, the CERCLIS site list, and RCRA Hazardous Waste TSD Facilities and Generator Lists, Wastewater Discharge sites, CED facilities and ERNS lists. New York State databases that were researched included the NYS Department of Environmental Conservation (NYSDEC) Inactive Hazardous Waste Disposal site lists, landfills and solid waste disposal facilities, registered underground storage tanks (USTs), wastewater disposal sites, air emission sources, and leaking USTs/materials spill lists. **Appendix D** provides the full listing of definitions for all categories and for convenience, definitions describing each of the regulatory listing of concern found within the Study Area are provided below:

- **Toxic Spills** consist of *active* and *inactive* or closed spills reported to State environmental authorities, including remediated and un-remediated leaking underground storage tanks (*LUST* incidents). Incidents which are described as active are currently undergoing continuing investigation. Incidents which are described as closed have been addressed to the satisfaction of the New York State Department of Environmental Conservation (NYSDEC).

- **New York and Local Petroleum Bulk Storage (PBS) Facilities** consist of sites with more than a 1,100-gallon capacity for storing petroleum products.

- **Resource Conservation and Recovery Act Information (RCRA) Generators** consists of facilities reported by the New York State manifest system and the United States Environmental Protection Agency (USEPA) RCRA Information System and includes waste facilities with violations reported by the USEPA pursuant to RCRA.

- **Federal Permit Compliance System Toxic Wastewater Discharges (PCTWD)** are facilities permitted to release toxic wastewater discharges.

[17] Report by Toxics Targeting, Inc. December 2013. (Provided to Town of Riverhead and NYSDOS on CD). Toxics Targeting provides database services for the preparation of Phase I Environmental Site Assessments. http://www.toxicstargeting.com/

- **New York State Major Oil Storage Facilities (MOSF)** are sites with more than a 400,000-gallon capacity for storing petroleum products.

- **Federal Civil and Administrative Enforcement Docket (CED) Facilities** are sites that have been subject to judiciary cases filed on behalf of the USEPA and the Department of Justice.

All of the listings included in the Toxics Targeting report were reviewed to identify sites in the Study Area which may present a concern related to redevelopment potential or acquisition. Review of the database identified numerous facilities in each section of the Study Area. Most listings were considered to have no apparent environmental concern for a variety of reasons which included minor releases that may be considered *de minimis*, releases that were addressed to the satisfaction of the governing regulatory agency, or were not considered based on professional experience, to present a significant threat to the environment.

It should be noted that the listing of a property under a regulatory jurisdiction in itself may not present an obstacle to redevelopment. However, a review of each entry was conducted and professional judgments were made as to the potential impact of each listing. A summary of the seventeen properties which were considered to be of concern as related to potential redevelopment in the Study Area are provided in **Table 3-3**[18]. Sites were characterized by a general description of the degree of concern based upon our professional experience which included:

- **Slight Concern** – Facilities which have the potential to impact the environment (i.e. soil, groundwater, surface water, air, etc.) and will require additional investigation (i.e. supplemental testing and analysis) to confirm if an impact has occurred.

- **Moderate Concern** – Facilities that likely have impacted the environment due to the existing or former intensity of use and/or quantities of hazardous materials stored. Additional investigation is advisable to ascertain the extent and degree of impacts that have occurred.

- **Major Concern** – Facilities with known impacts to the environment which may also impact adjacent properties. These sites would require Phase I and Limited Phase II Environmental Site Assessments and may require some degree of remediation prior to re-use.

It is noted that because of the size of the Study Area, the database service divided the report into four sections from west to east, and these numbers were used to identify the sites with regulatory listings.

[18] It is noted that site address and tax map numbers have been omitted from this table for privacy of the property owners.

TABLE 3-3
FACILITIES OF POTENTIAL CONCERN
IDENTIFIED IN THE TOXICS TARGETING REPORT

Land Use	Regulatory Listing	Concern Level for Redevelopment or Acquisition
Gas Station	PBS Facility	**Slight Concern** – No PBS Facility information available, cannot rule out presence of one or more tanks.
Gas Measuring and Regulation Station	PBS Facility RCRA Generator PCTWD Facility	**Major Concern** – Facility has been reported to generate a large quantity and variety of hazardous wastes as well as formerly utilizing numerous high capacity storage tanks for a variety of oils. Several of the tanks have been removed. Facility is also listed as an active minor industrial waste discharger. The presence of residual wastes or significant contamination cannot be ruled out. However, this property is owned by the utility and there are no known plans for redevelopment of this site.
Vacant Land	MOSF PBS Facility	**Moderate Concern** – Facility was listed as a Major Oil Storage Facility but no information was provided and the above ground tanks have since been removed. Facility was also listed as a PBS facility which utilized a variety of high capacity tanks used for the storage of fuel oil and kerosene that were removed. The presence of residual waste or contamination cannot be ruled out. Thus, prior to redevelopment, testing would be required.
Storage, Warehouse, and Distribution Facilities	RCRA Generator PBS Facility	**Slight Concern** – Facility was listed as a RCRA Generator that produced a small quantity of hazardous waste and as a PBS Facility but no additional information was provided. The presence of minor residual waste or significant contamination as well as the presence of a tank cannot be ruled out.
Office	Closed Spill	**Moderate Concern** - Unknown source of petroleum reported by owner. Sheen observed on surface water. Contractor retained by DEC for corrective action. Included in list due to unknown source.
Storage Facilities	PBS Facility Closed Spill CED Facility	**Moderate Concern** – Facility was listed as a PBS Facility that utilized numerous high capacity tanks used for the storage of fuel oil and kerosene which have been removed. The site was also the subject of a civil enforcement action due to the release or improper storage of ammonia. The presence of residual waste or significant contamination cannot be ruled out.
Storage, Warehouse, and Distribution Facilities	PBS Facility Closed Spill RCRA Generator	**Moderate Concern** - Facility is listed as a PBS facility with underground tanks used for the storage of fuel oil and large drum storage areas. The potential for a leaking tank is possible. Minor amounts of waste was generated and is not considered a major issue.
Gas Station	Active Spill Closed Spill PBS Facility	**Major Concern** – Facility is an active gasoline station with numerous high capacity tanks and is the subject of an active spill investigation with soil and groundwater contamination. Could present an issue to adjacent properties and require cleanup prior to redevelopment.
Auto Repair	Active Spill PBS Facility RCRA Generator	**Major Concern** – Facility is a former auto use and service station with numerous high capacity tanks that have been removed and is the subject of an active spill investigation with soil and groundwater contamination. Field inventory found that the site is currently vacant though additional site reconnaissance should be conducted to verify. Could present an

Land Use	Regulatory Listing	Concern Level for Redevelopment or Acquisition
		issue to adjacent properties.
Downtown Row Type	PBS Facility	**Slight Concern** – No PBS Facility information available, cannot rule out presence of one or more tanks.
Downtown Row Type	PBS Facility	**Slight Concern** – No PBS Facility information available, cannot rule out presence of one or more tanks.
Parking Lot	PBS Facility RCRA Generator	**Moderate Concern** – Facility is a former dry cleaner that generated spent halogenated solvent as well as a PBS Facility. No tank information was provided. Cannot rule out the potential for residual contamination from dry cleaning operation or the presence of a tank.
Downtown Row Type	PBS Facility RCRA Generator	**Moderate Concern** – Facility was a dry cleaner that generated spent halogenated solvent as well as a PBS Facility. Now used for another use. Two above ground tanks are present but are not considered a concern. Cannot rule out the potential of residual contamination from dry cleaning operation.
Retail building	PBS Facility	**Moderate Concern** – Facility utilizes two underground tanks for the storage of fuel oil. Cannot rule out potential of a leaking tank.
Auto Repair	Active Spill Closed Spill PBS Facility RCRA Generator	**Major Concern** – Facility is a gasoline station with numerous high capacity tanks that have been removed and is the subject of an active spill investigation with soil and groundwater contamination. Field inspection indicates that the site is currently an active gasoline station. Could present an issue to adjacent properties.
Gas Station	PBS Facility RCRA Generator	**Slight Concern** – Facility is listed as a PBS Facility but no tank information was provided. Cannot rule out potential presence of tanks on property. Small quantity generator but does not appear to present a major issue.
Auto Towing	PBS Facility RCRA Generator	**Slight Concern** – Facility is listed as a PBS Facility with one underground tank. Cannot rule out potential for a leaking tank. No information was provided regarding the RCRA Generator designation.

Based upon available information, the area has only a few sites where the potential for environmental contamination could potentially present a major concern for redevelopment, however, addition investigation would need to be warranted to confirm the full extent and degree of contamination. No major regulatory sites were identified in the Study Area (i.e. Superfund sites, Inactive Hazardous Waste sites, RCRA Corrective Action Activity, CERCLIS sites) and correspondence with Walter Parrish of the NYSDEC Division of Environmental Remediation confirmed that there are no major cleanup efforts currently required or underway within the Study Area. Thus, barriers to redevelopment within the Riverhead BOA Study Area are not generally due to prior use and environmental contamination. However, where commercial/industrial properties have been abandoned for a number of years, redevelopment would require site specific Phase I Environmental Site Assessments to determine potential for contamination and need for site testing and possible clean up actions.

While environmental contamination from prior activities may not appear to pose a major obstacle to redevelopment within the Study Area, other factors are contributing to the pace that

revitalization is occurring in the area[19]. There are a number of key properties identified through the course of the study which are highly visible, have been abandoned for many years, or are contributing to blighted conditions along the corridor. Other properties are simply underutilized and have the potential for public benefit if redeveloped in a coordinated fashion.

Table 3-4 provides a list of the vacant, abandoned or underutilized properties which were identified as potential strategic sites through the course of this study. The potential brownfields, vacant and underutilized sites are illustrated on **Figure 3-9A**. **Section 3.2.3** identifies and describes those sites whose redevelopment was considered essential to the revitalization of the area.

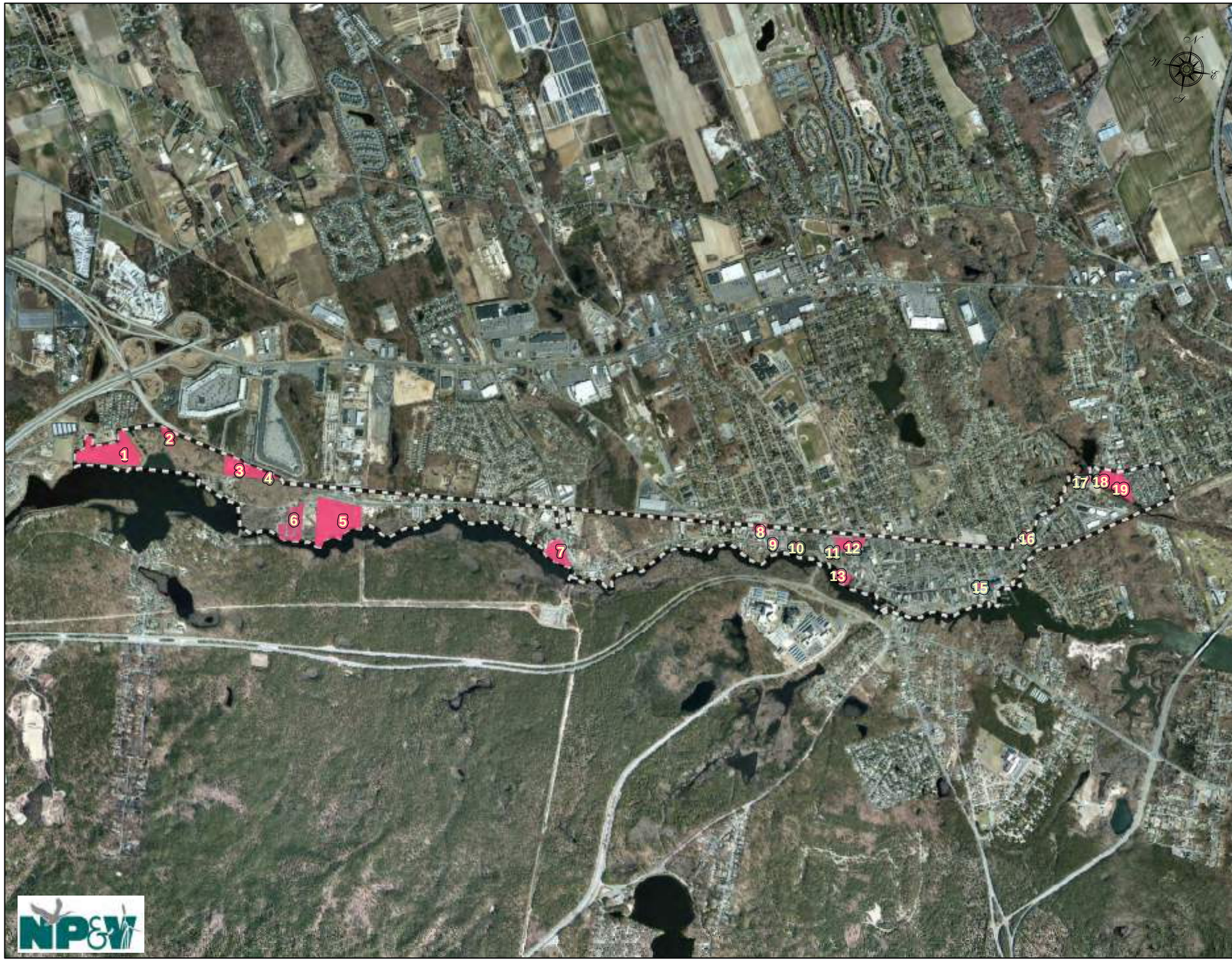
TABLE 3-4
POTENTIAL BROWNFIELDS, VACANT AND UNDERUTILIZED SITES

ID #	Address	Tax Map Number (s)	Land Use	Discussion
1	2011 River Road	118 – 4 – 5.10	Former Olin Warner Duck Farm	Prior duck farm use potentially impacting water quality of the Peconic River. Not a highly visible site; however, redevelopment of the site with residential or river recreational/lodging permitted under zoning. The property is currently developed with a single family residence.
2	1863 West Main Street	118 – 4 – 8.1	Auto Repair	The property is developed with an auto service use and an accessory use of a cell tower. Many automobiles are parked outside on the site. This property would be a priority for redevelopment due to its high visibility at the gateway of the Route 25 corridor leading into downtown Riverhead. WSRR regulations constrain redevelopment.
3	1751 West Main Street	118-4-10	Former 84 Lumber	Vacant lumberyard which contains several warehouse buildings. The property has high visibility on the corridor. WSRR regulations currently constrain redevelopment.
4	1681 West Main Street	118 – 4 – 11	Auto Repair	This is a site whose redevelopment would be desirable to improve aesthetics in the gateway area to the downtown. The site has a small building and many vehicles and equipment stores outside. WSRR regulations constrain redevelopment.
5	1501 – 1595 West Main Street	119 – 2 – 56-58	Former Bridge View Duck Farm	This is a highly visible site on the south side of West Main Street. It is an abandoned duck farm property and contains several deteriorated structures visible from the roadway and is overgrown. Wetlands and WSRR regulations constrain redevelopment.

[19] There are unknown factors about privately owned properties. (I.e. the absence of a property from the environmental databases does not certify the absence of environmental contamination - in all cases, site specific investigation would be warranted)

ID #	Address	Tax Map Number (s)	Land Use	Discussion
6	Forge Road	139-1 (multiple lots)	Forge Road Mobile Home Park	This mobile home park is located on the Peconic River and was constructed prior to Suffolk County Sanitary Code requirements for single family residential on site sanitary systems. The mobile home park is well maintained by its owners. However, it is expected that water quality would benefit from connection of the area to Riverhead's STP or an alternative wastewater treatment system.
7	1175, 1161, 1167, 1153-1159, 1165, & 1141 West Main Street	125 – 2 – 25.2, 26.2, 27.2, 27.3, 27.5, & 28	Mix of uses including auto repair	This group of sites include auto repair uses and mix of contactor uses, office and restaurant uses situated on the Peconic River. The group of sites was identified as potential redevelopment area with a concept for coordinated redevelopment prepared. WSRR regulations and need for sewage treatment options constrain redevelopment.
8	656 West Main Street	124 – 3 – 17	Ice and fuel company	The existing land use at this property includes fuel storage. The business is in operation and there is no indication that the property is to become available for redevelopment. It is noted that redevelopment would require site investigation and possible testing to determine presence of environmental contamination from past and current use of the property.
9	626 West Main Street	124 – 3 – 21.1	Gas Station	The property is developed with a gas station which was recently upgraded and thus is not expected to be a candidate for redevelopment in the near future. However, redevelopment would require site investigation and possible testing to determine presence of environmental contamination.
10	504 West Main Street	128 – 2 – 4	Auto Repair (Vacant)	This property contains an abandoned auto use. It is a small property (approximately 0.2 acre) with limited potential for redevelopment to act as a catalyst for other development. Redevelopment would require site investigation and possible testing to determine presence of environmental contamination.
11	205 Osborn Avenue	128 - 2 - 22	Medial Office (Vacant)	This property contains a long vacant building formerly used for radiology. The location is significant in the context of potential reuse of the Town railroad parking lot for development or the realignment of Court Street and Nugent Street for improvements at that intersection which is currently offset.
12	Block bounded by Railroad Avenue, Court	128 – 3 – 12.1, 12.2, 12.3, 13.0, 14.0,	Town owned surface parking and	This is a group of sites that includes the Town of Riverhead parking lot adjacent to the train station and the adjacent block, which contains a mix of

ID #	Address	Tax Map Number (s)	Land Use	Discussion
	Street, Osborn and Griffing Avenues	15.0, 17.1, 18.0, 19.0, 20.0	mix of uses (residential, retail, office)	retail, residential and office uses. The surface parking area and potentially the adjacent block provide a unique opportunity for a coordinated redevelopment.
13	305 West Main Street	128 – 3 – 48, 49	Auto Repair (Vacant)	This former auto repair has been vacant for many years. Redevelopment would require site investigation and possible testing to determine presence of environmental contamination related to the former use of the site.
14	243-255 West Main Street	128 – 3 – 50, 51	Auto Repair (Vacant)	As with the neighboring site, this is a former auto repair use, and redevelopment would require site investigation and possible testing to determine presence of environmental contamination.
15	415 East Main Street	129 – 4 – 17	Gas Station Auto Repair	This property is an active gas station with a central location in the downtown; redevelopment would require site investigation and possible testing to determine presence of environmental contamination.
16	712 East Main Street	127 – 4 – 32.2	Dry Cleaners	Active dry cleaner use with no indication that the business seeks to cease operations. Redevelopment would require site investigation and possible testing to determine presence of environmental contamination.
17	944 East Main Street	109 – 2 – 13	Auto Repair	Property is developed with an auto repair business which is located on the headwaters of creek which is a tributary to the Peconic River and is considered important as a gateway site at the east end of the study area. Redevelopment would require site investigation and possible testing to determine presence of environmental contamination.
18	965 East Main Street	131 – 1 – 1.1	Auto Towing	Property developed with an auto related use; redevelopment would require site investigation and possible testing to determine presence of environmental contamination. Important as gateway site.
19	27 Hubbard Avenue	131 – 1 – 2.2	Recycling Yard	Property developed with recycling operations center which includes crushing operations. Redevelopment would require site investigation and possible testing to determine presence of environmental contamination. Site use has a history of complaints as a nuisance use for surrounding property owners.



Town of Riverhead
Peconic River/Rt. 25 Corridor

NYS BOA Step II Nomination

FIGURE 3-9A
Potential Brownfields, Vacant and Underutilized Sites

Legend

BOA Boundary

Potential Brownfields, Vacant and Underutilized Sites

Note: Refer to Table 3-4 for information regarding potential brownfields, vacant and underutilized sites.

Sources: Riverhead GIS, NYS GIS 2013 Orthoimagery

1 inch = 2,000 feet

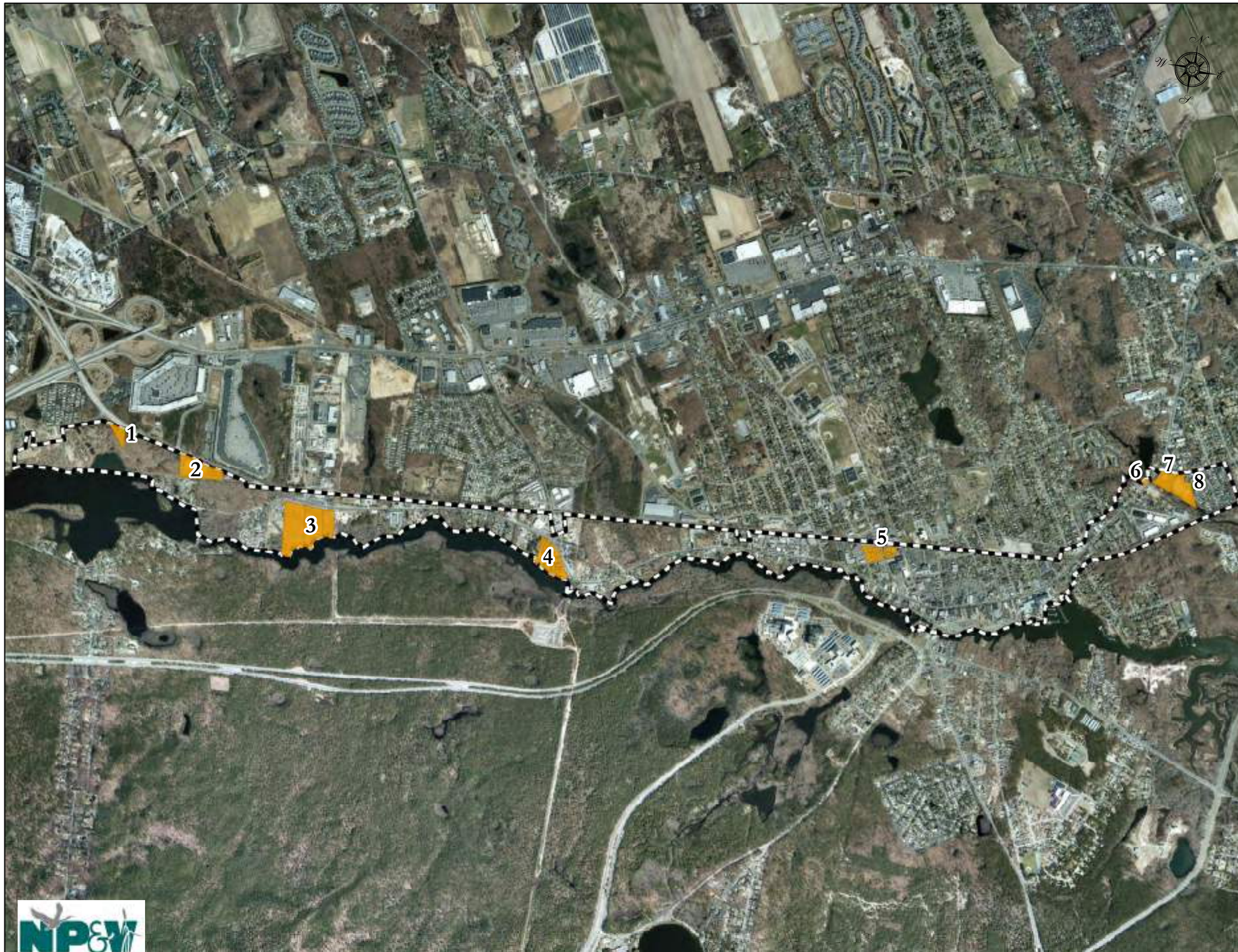
0 2,000 4,000 Feet

3.2.3 Strategic Sites

Strategic sites are those properties with the greatest potential for redevelopment and whose re-use could provide a catalyst for redevelopment and/or revitalization in the surrounding area. The selection of strategic sites is dictated by Town goals, local needs, and other factors of local importance. The selection can also depend on factors such as the level of contamination, ownership/owner willingness, and the availability of adequate infrastructure for redevelopment[20].

NP&V identified a total of eight strategic sites based upon input from the Town, stakeholders and the community. These sites are those properties whose redevelopment would be anticipated to have significance and catalyze redevelopment and revitalization in the surrounding areas. In two locations, these sites are made up a many individual tax parcels and a redevelopment concept was prepared to identify a mix of land uses for consideration under the future alternative development scenarios. **Table 3-5** provides a summary of recommended strategic sites and explanation for their respective selection, and identifies recommendations for environmental assessment, as well as other possible impediments to meeting the goals for redevelopment of these sites (e.g. potential contamination/cleanup needs, infrastructure improvements, zoning amendments). **Figure 3-9B** shows the location of the eight strategic sites. More details regarding redevelopment concepts provided in **Section 4**.

[20] It is noted that in the BOA Study Area there are numerous vacant and/or underutilized sites whose redevelopment would provide benefit, though have not been identified as strategic sites.



Town of Riverhead
Peconic River/Rt. 25 Corridor

NYS BOA Step II Nomination

FIGURE 3-9B

BOA Strategic Sites

Legend

BOA Boundary

Strategic Sites

Sources: Riverhead GIS
NYS GIS 2013 Orthoimagery

1 inch = 1,800 feet

0 1,800 3,600 Feet

TABLE 3-5
RECOMMENDED BOA STRATEGIC SITES

Strategic Site #	Address	Tax Map Number	Land Use	Discussion	
1	1863 West Main Street	118 – 4 – 8.1	Auto Repair	This property is currently in use as Dynamic Auto. It is located within a Recreational area of the WSRR and reuse of the property is limited due to this designation. This property is identified as W1 on the Alternative Development Scenarios Map included as Plate 2 and discussed in **Appendix I.** This property is important due to its location as a gateway on West Main Street.	
2	1751 West Main Street	118 – 4 – 10	Former 84 Lumber - currently vacant	This site is a former lumberyard and has access to a rail siding, making it a possible location for transit in the future. The property is proximate to the Tanger Outlet Center and could provide a visitor oriented use - such as a visitor's center with a food court and parking. The rail siding could be accessed for a shuttle 'scoot train' in the future as visitation to the downtown increases. The property has high visibility on the corridor and has been vacant since 2013.	

Strategic Site #	Address	Tax Map Number	Land Use	Discussion	
3	1581 West Main Street	119 – 2 – 56 119 – 2 – 57 119 – 2 – 58	Former Bridge View Duck Farm	This site is highly visible site with an abandoned and deteriorating building visible from West Main Street. The Bridge View Duck Farm operated on this site between 1966 and 2001. The site is now overgrown. The property is located adjacent to the west of Suffolk County Parkland and has frontage on the Peconic River. The property is over 16 acres in size. The WSRR Recreation designation limits use on the property to residential and limited recreational related retail. Input from DEC Region 1 was obtained regarding the potential for river oriented lodging and it was indicated that such use is compatible with the regulations. The former use as a duck farm could have resulted in subsurface contamination and nutrient rich soil from duck waste contributing to a high nitrogen load to the river. Reuse of the site or acquisition for recreational use should be considered a priority.	
4	1175, 1161, 1167, 1153-1159, 1165, and 1141 West Main Street	125 – 2 – 25.2 125 – 2 – 26.2 125 – 2 – 27.2 125 – 2 – 27.3 125 – 2 – 27.5 125 – 2 – 28.0	The existing land uses include three (3) single family residential homes, an existing fish market and restaurant, office, contractor yard/ outdoor storage areas,	This site contains a mix of uses, some are pre-existing nonconforming under the Recreational designation of the DEC WSRR regulations and Town zoning. The community identified this location as a priority in part due to the mix of uses that are essentially institutionalized due to the restrictions imposed on the properties. The visibility of the property at this curve in the road and gateway to the area via Mill Road provide an opportunity for a coordinated redevelopment (concept plan included in Section 4). The benefit of redevelopment would include aesthetic	 One of the ten properties (auto use)

Strategic Site #	Address	Tax Map Number	Land Use	Discussion	
			and auto repair shop	improvements/community character, the addition of tourism based features, water quality improvements related to removal of automotive uses and incorporation of stormwater management pond and the establishment of sewage treatment.	
5	Railroad Avenue between Griffing and Osborn Avenue	Train Station Parking and 128 – 3 – 12.1 128 – 3 – 12.2 128 – 3 – 12.3 128 – 3 – 13.0 128 – 3 – 14.0 128 – 3 – 15.0 128 – 3 – 17.1 128 – 3 – 18.0 128 – 3 – 19.0 128 – 3 – 20.0	Train Station Block (parking and mix of private uses in eastern block including takeout food service, office, residences, vacant restaurant)	The train station parking and nearby block have long been studied as a potential long range redevelopment. The block is within the Railroad Urban Renewal Area. Vintage Square redevelopment initiative included a vision for a mixed use development with a theater, office, retail and parking garage. This area provides an optimal location for mixed use including multifamily particularly in light of its proximity to transit, walkable to the center of downtown, and employment center (the Courts, commercial uses, and nearby office uses). As part of the alternative redevelopment scenarios (discussed in **Section 4**) NP&V prepared a concept plan that includes multifamily housing and a parking garage on this site. The properties are currently zoned D-3 and would require a zone change to allow the level of development envisioned in the concept plan. There are no records of environmental contamination on the sites, however, the individual properties would need further investigation into detailed historic land use, potential for USTs and other sources contamination that could impede redevelopment.	 Bing Map Bird's Eye View

Strategic Site #	Address	Tax Map Number	Land Use	Discussion	
6	944 East Main Street	109 – 2 – 13	Gas Station	The property is developed as an automotive repair use and has a history of minor environmental issues based upon the Toxics Targeting report. The site is small, however, important in that it provides a gateway opportunity at the east end of town in an area where there is little access to parks. The site is situated on a small freshwater pond that is a tributary to Sawmill Creek and Peconic Estuary and thus contamination on the site or to groundwater has the potential for impacts on surface water. The redevelopment as a park would provide recreational and aesthetic benefits for the community.	 Bing Map Bird's Eye View
7	965 East Main Street	131 – 1 – 1.1	Auto Towing	The auto towing use on the southeast corner of Hubbard Avenue and East Main Street was included on the original Town application for BOA funding due to historic auto related land use. On its own, the site is not a high priority, however, the site is included in the list of strategic sites as it provides an opportunity with the neighboring Gershow recycling facility for a better transitional land use - specifically multifamily housing.	 Bing Map Bird's Eye View

Strategic Site #	Address	Tax Map Number	Land Use	Discussion	
8	27 Hubbard Avenue	131 – 1 – 2.2	Gershow Recycling	The subject property is an auto salvage yard, (formerly Gallo) that is a source of complaints related to noise, odors and fugitive light, from the adjoining residential neighborhoods. The property was identified as a potential BOA site on the original grant application. The property history of auto salvage would imply the need for testing of soil and groundwater prior to redevelopment. This site is considered a high priority due to the potential impact on groundwater in a Peconic Estuary contributing area and incompatibility of land use. Multifamily housing would provide a suitable transitional land use here which could be expanded to include redevelopment of the property to the west. It is noted that this property is not within the sewer district and thus extension would be necessary to allow redevelopment.	 Bing Map Bird's Eye View

Along with the properties that are scattered throughout the BOA Study Area which may pose limitations due to redevelopment as a result of past use, there are other significant factors that contribute to Town's struggle to achieve revitalization for its downtown as well as for the approaches to downtown along the Peconic River.

Vacant and underutilized properties provide the greatest prospects whose redevelopment has the potential to promote other improvements in their vicinity and revitalization of the corridor and downtown as a whole. These sites are the subject of site profile worksheets that summarize available information for each site included in **Appendix E**. **Figure 3-9B** shows the locations of strategic sites/areas in the BOA whose redevelopment have potential to act as catalysts for revitalization of the Study Area as a whole.

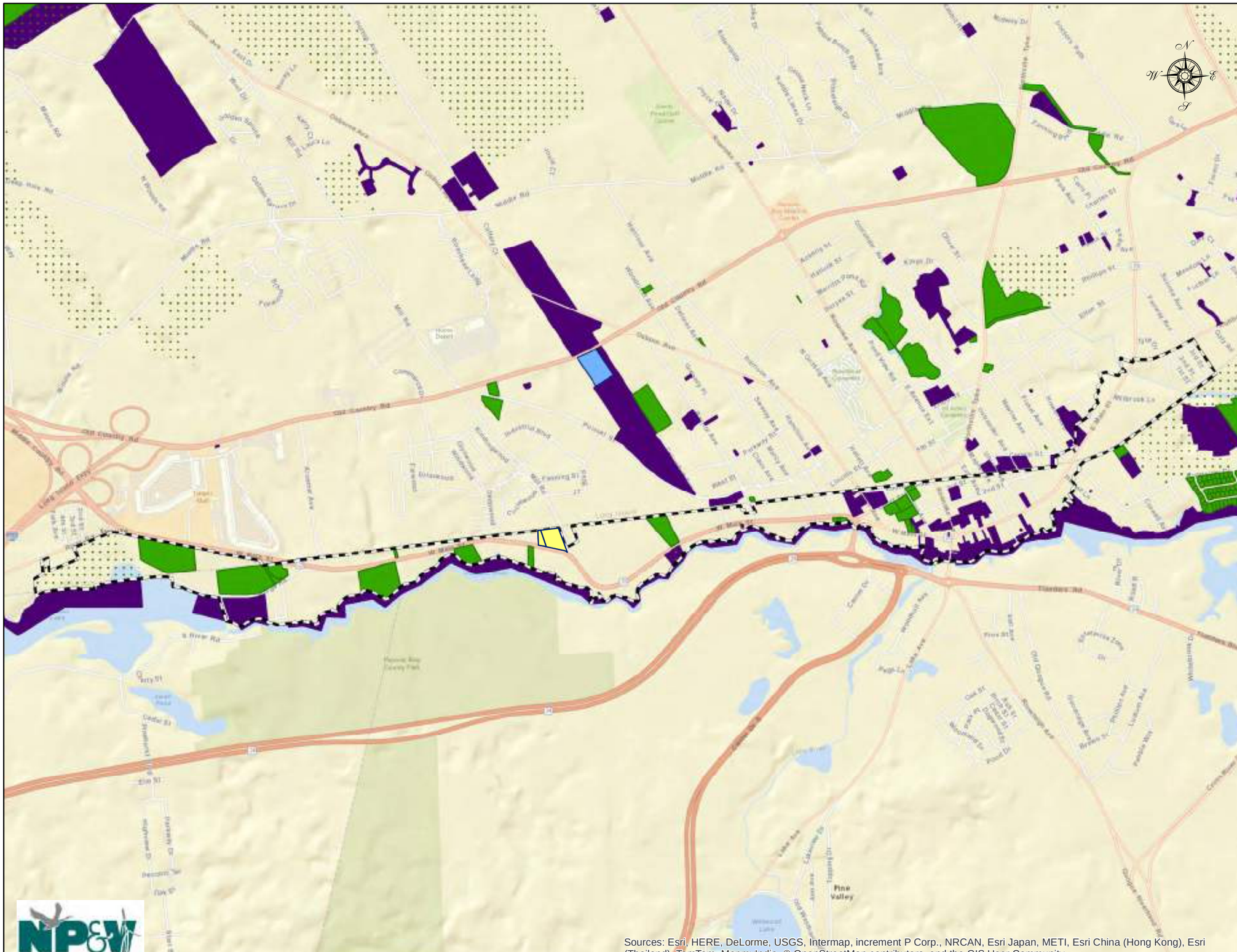
3.2.4 Land Ownership

Figure 3-10 shows the pattern of major publicly owned lands in the area. Most of the land within the Riverhead BOA study is privately owned. Even in the downtown area, which has the highest concentration of publicly owned properties, the majority of parcels within the downtown are privately owned. The Town of Riverhead owns numerous parking lots within the downtown, and the parking near the train station as well as the public library property, Riverhead Town Offices, former Fire Department site on 2nd Street, and the Riverhead Town Justice Court on Howell Avenue. The areas west and east of the downtown are generally privately owned, with the exception of a few large open space parcels owned by Suffolk County and a few properties (parklands and a small site with a sewage pump station) owned by the Town of Riverhead. The US owns the property developed with the US Post Office on Mill Road.

Also represented within the Study Area are utilities and properties owned by service providers or institutions, including the Suffolk County Historical Society, Suffolk County Community College Culinary Arts and Hospitality Center, and churches (First Congregational Church of Riverhead, Riverhead United Methodist Church). There are also privately owned properties for which development rights have been acquired such as the large property at the intersection of River Road and West Main Street.

The Peconic River is located along the southern boundary of the BOA Study Area, except for the very eastern section where the southern boundary becomes the Long Island Rail Road tracks instead of the waterfront. A total of 56 properties within or partially within the BOA Study Area are owned by the Town of Riverhead including the underwater areas of the Peconic River.

Town owned properties include a large parcel of undeveloped land on Forge Road in the western portion of the Study Area. Parkland and open space owned by the Town of Riverhead include the Peconic Riverfront Park, open space near the East Ends Arts, and Grangebel Park.



Town of Riverhead
Peconic River/Rt. 25 Corridor

NYS BOA Step II Nomination

FIGURE 3-10
Publicly Owned Land

Legend

- BOA Boundary
- US Postal Service
- State Owned Lands
- County Owned Lands
- Town Owned Lands
- Dev Rights Acquired

Sources: ESRI WMS; Town of Riverhead

1 inch = 1,800 feet

0 1,800 3,600 Feet

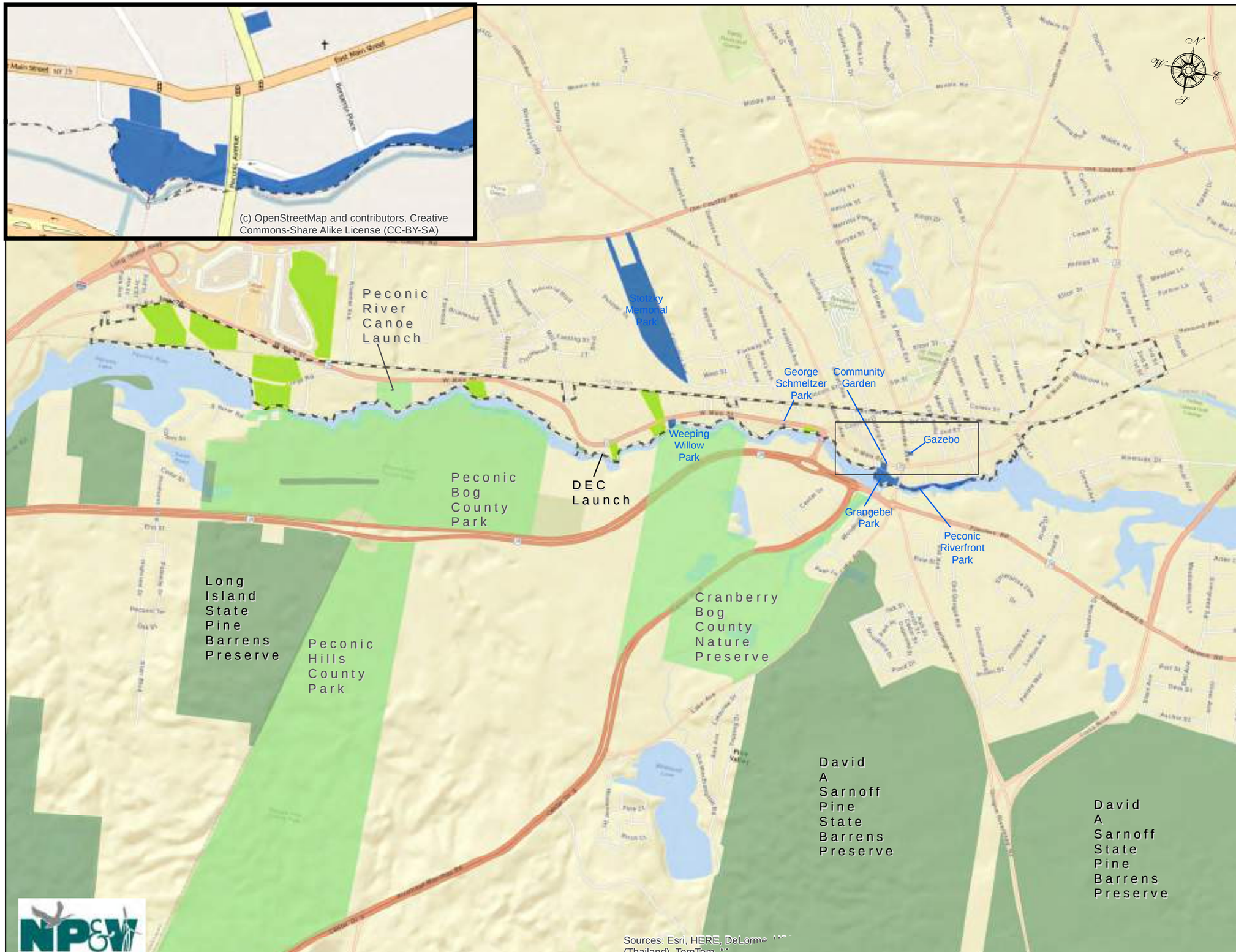
Many of the properties owned by Suffolk County within the BOA Study Area are clustered in the downtown area associated with the Court, with the remaining Suffolk County properties scattered throughout the area west of the downtown. West of the downtown area, the Suffolk County owned land consists of large vacant undeveloped parcels on West Main Street near River Road and Forge Road, and other smaller undeveloped parcels scattered along West Main Street.

Within the BOA Study Area, three sewer pump stations are located on Town-owned land. The pump stations are located at the following locations: West Main Street near the intersection with Raynor Avenue, East Main Street near McDermott Avenue, and in the northeast section of the BOA Study Area near the intersection of Hubbard Avenue and East Main Street.

3.2.5 Parks, Recreation and Open Space

There are a significant number of parks and open space areas within the BOA boundary in within the surrounding area. There are two important Town of Riverhead parks located in the downtown area (**Figure 3-11**). Grangebel Park is located west of the bridge at Peconic Avenue and contains numerous attributes including walking and biking paths, a performance stage, seating areas, a former pump house which provides an opportunity for a pop-up shop, and sculptures. There is a fish ladder within the park to connect the tidal and freshwater surface waters. The Peconic Riverfront Park is located just east of Peconic Avenue and extends along the Peconic River. The Peconic Riverfront Park contains a path along the waterfront, dock, benches, gazebos and picnic tables. Within the BOA area, there are also numerous county owned properties which are dedicated open space lands. The majority of these properties are located west of the downtown and scattered along West Main Street. Two Town parks are located on the Peconic River. Weeping Willow Park provides small boat access and another small park known as George Schmelzer Riverfront Park, provides picnic tables and allows enjoyment of views of the river.

In addition to the land dedicated to parks within the BOA boundary area, there are other important parks and recreational resources located nearby. North of the boundary there is Stotzky Memorial Town Park located on Pulaski Street which contains extensive athletic fields and courts and gathering areas. In addition, south of the BOA study and across the Peconic River, there are numerous parks and open space including the Long Island State Pine Barrens Reserve, Peconic Bog County Park, Peconic Hills County Park, Cranberry Bog County Nature Preserve, and the David A. Sarnoff Pine State Barrens Preserve which provide opportunities for hiking and bird watching.



Town of Riverhead
Peconic River/Rt. 25 Corridor

NYS BOA Step II Nomination

FIGURE 3-11

Parks & Open Space

Legend

- BOA Boundary
- Town Parks
- County Parks/Open Space
- State Parks
- Open Space

Sources: ESRI WMS; NYNHP; NYSGIS Clearinghouse; SC Real Property, 2013

1 inch = 2,000 feet

0 2,000 4,000 Feet

The parks and open space that exist within the Study Area and in the surrounding area are sufficient to meet the needs of the local population. While there are adequate park facilities within the Study Area, there is a desire to establish a continuous river walk extending from downtown along the Peconic River to the western area of the BOA. In some areas this may be accomplished through easements, however, the depth of many of the existing lots, particularly near the Center Street Bridge, would preclude the addition of a public easement while maintaining privacy for the property owners. However, it is recommended that the vision to achieve a continuous public access along the riverfront be pursued through property acquisition, easements, and design of properties that apply for site plan approval. Where riverfront trail is not feasible, connections should be provided via sidewalks on Route 25.

Throughout the entire Study Area, Route 25 is designated as a connecting bicycle route. Additional connecting bicycle routes are located north of Route 25 and extend past the BOA boundary on Raynor Avenue and Roanoke Avenue. There is an On-Road Bicycle Route, Class 3 with signs located on Ostrander Avenue in the Study Area. At the northeastern BOA boundary border, there is a small segment of an On Road State Bicycle Route, Class 3 with signs on Hubbard Avenue. This is a long bicycle route but only a very small portion falls within the BOA boundary. Recommendations for extended bicycle routes and off road opportunities are identified on **Figure 3-12C**.

It is noted that where County property exists along the south side of West Main Street, a bike path is recommended thru those properties and would require coordination with the County Parks Department. In addition, there may be opportunities for connections along the river or as connecting paths thru private property, where such an amenity would be consistent with the redevelopment of a site.

In the Riverhead BOA Study Area, the majority of bicycle racks are clustered around Peconic Avenue on Main Street in the downtown area. Bicycle racks can be found in the following locations: the intersection of Griffing Avenue and West Main Street, the intersection of 1st Street and Roanoke Avenue, on Main Street between East Avenue and Roanoke Avenue, and two bicycle racks in the parking area south of Main Street near the Peconic Riverfront Park. There is one additional bicycle rack on the northern border of the Study Area at the intersection of Howell Avenue and East Main Street.

3.2.6 Historic Resources and Archaeologically Significant Areas

Historic resources are assets which promote a community's unique identity and set it apart from other locales. While listing on the National Register of Historic Places helps to identify the historic resources in a community, protection is not afforded to these important assets in the absence of a local law. In the Town of Riverhead, Chapter 73, Landmarks Preservation, of the Town Code is intended to provide this regulatory protection. A Landmarks Preservation Commission (LPC) has been created, which evaluates and designates historic districts and landmarks. Once a property or structure is so designated: "*No structure, site, place or building designated as a landmark wholly or partly within the boundaries of an historic district shall be*

constructed, altered, repaired, moved or demolished except in compliance with the requirements set forth in this article. No permit shall issue for the demolition, alteration or improvement of a site, structure or building if it is proposed for designation as a landmark or within a proposed historic district unless said work is consistent with the criteria and procedures set forth herein."

In contrast, listing on the National Register of Historic Places provides little protection to historic resources. As described on their website, the National Park Service administers the National Register of Historic Places. The Register is the official Federal list of districts, sites, buildings, structures, and objects significant in American history, architecture, archeology, engineering, and culture. National Register properties have significance to the history of their community state, or the nation. Nominations for listing historic properties come from State Historic Preservation Officers, from Federal Preservation Officers for properties owned or controlled by the United States Government, and from Tribal Historic Preservation Officers for properties on Tribal lands. Private individuals and organizations, local governments, and American Indian tribes often initiate this process and prepare the necessary documentation. A professional review board in each state considers each property proposed for listing and makes a recommendation on its eligibility. National Register listing places no obligations on private property owners. There are no restrictions on the use, treatment, transfer, or disposition of private property. Listing also does not lead to public acquisition or require public access. Lastly, unlike with a local town landmark designation, a property will not be listed if, for individual properties, the owner objects, or for districts, a majority of property owners object.

This section discusses the areas that are:

- Designated as a local landmark or historic district;
- Listed on the National Register of Historic Places.

The Study Area is host to numerous historic districts and structures, some of which are protected at the local level. **Figure 3-6** on Page 53 illustrates the historic and cultural assets in the area, as well as the historic districts in the BOA Study Area. The largest town designated historic district is the Town Historic District which extends from the intersection of Court Street and West Main Street as the western boundary to the intersection of East Main Street and Riverside Drive as the eastern boundary. The southern boundary of the Town Historic District is the Peconic River and the northern boundary extends beyond the BOA Study Area. Throughout most of the Town Historic District the northern boundary follows the Long Island Rail Road tracks, except for an area that extends north to Pulaski Street in the western section of the District.

The Riverhead Main Street Historic District (11NR06291) is a National Register Historic District that is fully included within the town designated Town Historic District. It includes properties that are in the heart of the downtown from Griffing Avenue in the west to Union Avenue in the east along Main Street. This district contains many buildings used for restaurants and commercial space in the downtown area.

There are a number of National Register listed and eligible properties outside the boundaries of the Main Street National Register Historic District, including:

- United States Post Office - listed (90NR01877)
- Suffolk County Historical Society Building – listed (93NR00501)
- Corwin Terry House – eligible – 540-542 East Main Street
- Downs-Edwards-Tuccio House – eligible – 547 East Main Street
- Second Street firehouse – 24 East Second Street
- Title Guarantee & Trust Co. – eligible – 202 Griffing Ave.
- Suffolk County Cooperative Extension Service – eligible – 246 Griffing Ave.
- Suffolk County Courthouse North Wing, County Clerk Office**:** 243**:** Griffing Ave.
- Suffolk County Courthouse, South Wing (Former Treasurer's Office)**:** 235**:** Griffing Ave.
- Suffolk County Courthouse Complex – eligible - 225-243 Griffing Ave.

To the north and in close proximity to the BOA Study Area boundaries is the Upper Griffing-Roanoke Avenue District which is eligible for listing on the National Register. This district is located in the northwest section of the Town Historic District. Finally, there is a National Register eligible historic district surrounding 2nd Street in the center of the downtown. This District would be located north of the Main Street National Historic District and still primarily within the Town Historic District. It extends beyond and slightly to the north of the BOA Study Area boundary. To assist the LPC in an application to SHPO for the establishment of a national Register district centering on 2nd Street, Hawkins, Webb & Jaeger (an affiliate of NP&V specializing and architecture and design) provided supporting historical documental for the individual buildings and a professional assessment of the contribution that each building plays in the support of the National Register Historic District. A copy of the materials prepared on behalf of the Town are provided in **Appendix C**.

Archaeology studies are frequently prepared during the environmental review of proposed projects. If an archaeological artifact is found and the cultural resource investigation transmitted to the NY State Historic Preservation Office (SHPO), it is identified in the New York State Cultural Resource Information System (CRIS) database. A circle is then drawn at a set radius distance around the artifact, to indicate additional artifacts may be present within proximity to the archeological artifact. According to the maps available for review through the CRIS, three archeologically sensitive areas are located partially within the Riverhead BOA boundary illustrated in the graphic below.

Image of Archeologically Sensitive Areas within the BOA Study Area
Source: New York State Cultural Resource Information System

Properties within the gray areas would be more likely to have cultural resources present on site and applicants for development on sites in these areas may be required to perform a Cultural Resource Investigation. One potentially archeologically sensitive area is located in the downtown area of Riverhead and extends from Marcy Avenue at the west to Howell Avenue to the east. This archeologically sensitive area extends beyond the northern and southern boundaries of the BOA Study Area. Another potentially archeologically sensitive area is located along West Main Street, just east of the intersection at Mill Road. A third potentially archeologically sensitive area is in the western portion of the Study Area on West Main Street. The boundaries for this area include the land just south of Tanger to the west, slightly west of the intersection of Mill Road and West Main Street as the eastern boundary, and it extends beyond the northern and southern BOA boundaries. Lands adjacent to the Peconic River, which would have been a water route inland from the resource rich bays, would have been used by Native Americans. A developer in these areas may be required to have a Phase I Cultural Resource Investigation prepared to identify potential for archeological resources on the property.

The primary goal of a Phase I Cultural Resource Investigation is to identify archaeologically sensitive areas, cultural/sacred areas and standing structures that are at least 50 years old, which may be affected by a project and to locate all prehistoric and historic cultural/archaeological resources that may exist within the proposed project area. The first phase is a reconnaissance study, completed to determine the presence or absence of sensitive cultural resources and includes a Phase IA (Literature Search and Sensitivity Study) and Phase IB (Field Investigation)[21]. If no cultural resources are discovered, no further analysis is required. If resources are discovered, modifications to the proposed project may be made to avoid or minimize potential impacts. If resources are identified that cannot be readily avoided, then additional examination is needed to establish the significance of the resource. In some cases, a survey is not necessary, especially if substantial prior ground disturbance can be documented, as in these cases, the likelihood of identifying significant cultural resources on site would be unlikely.

[21] More information available at http://parks.ny.gov/shpo/environmental-review/archeo-survey.aspx.

3.2.7 Transportation Systems and the TOD Growth Plan

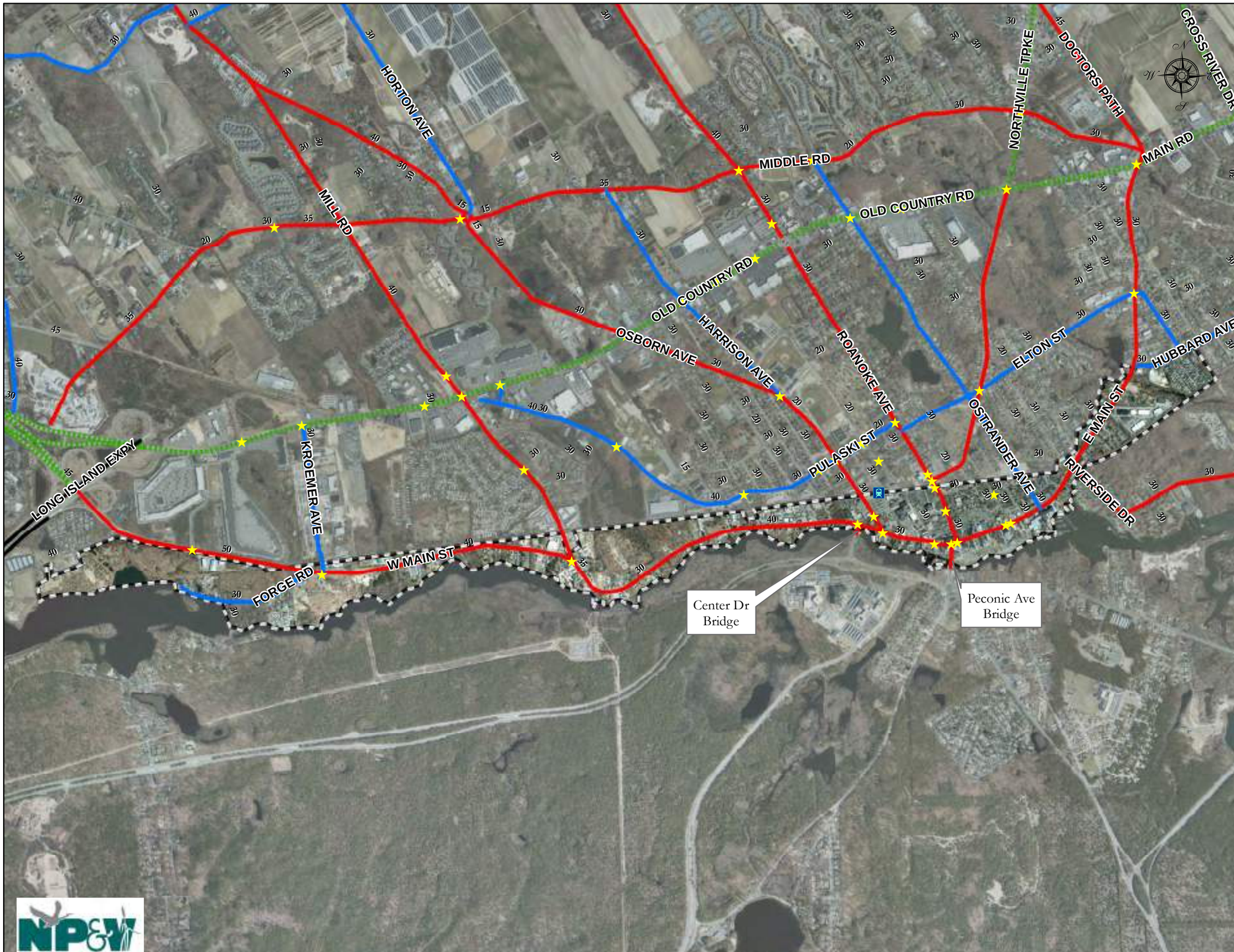
As a component of this BOA Study, a Transit Oriented Development (TOD) Growth Plan was prepared to evaluate existing, and predict future, traffic growth within the Study Area. **Figure 3-12A** provides a map of the transportation systems in the area and illustrates functional classifications[22] of roadways (primary, minor arterials and major collectors), speed limits on main roads, traffic signals and the location of the LIRR commuter station in downtown Riverhead. Within the Study Area there are minor arterials (NY SR 25 (Main Street), Riverside Drive, Mill Road, Osborne Avenue, CR 63 (Peconic Avenue) and CR 73 (Roanoke Avenue)) and major collector streets (Forge Road, Kroemer Avenue, Ostrander Avenue and Hubbard Avenue). The remaining roads are classified as local roads.

Although public transportation opportunities exist in the Study Area with the presence of a LIRR Train Station in Riverhead's downtown and Suffolk County Transit bus service provided via multiple routes in the area, the majority of trips into and out of the Study Area are vehicular trips. Recent efforts to improve the roadway environment to encourage pedestrian activity have occurred, including the most recent sidewalk improvement project completed by the NYSDOT, which extended sidewalks from downtown Riverhead to River Road at the western end of the Study Area.

What follows is a summary of the traffic study prepared as part of the TOD Growth Plan for the BOA Study Area and recommendations related to improving traffic flow in the downtown, as well as overview of findings and recommendations regarding parking, bicycle and pedestrian improvements and transit. The Full TOD Growth Plan and Traffic Impact Study are provided under separate cover.

[22] According to the NYSDOT website, functional classification is the process by which roads, streets, and highways are grouped into classes according to the character of service they provide. Individual roads and streets do not serve travel independently but as part of a network of roads through which the traffic moves. Functional classification defines the nature of this movement by defining the part that any particular road or street should play in serving the flow of trips through a highway network and the type of access it provides to adjacent properties. Functional classification describes the importance of a particular road or network of roads to the overall system and, therefore, is critical in assigning priorities to projects and establishing the appropriate highway design standards to meet the needs of the traffic served. Functional classification is also used to determine which roads are eligible for project funding under the Surface Transportation Program (STP) administered by the Federal Highway Administration.

There are currently seven functional classifications which are further distinguished as urban and rural yielding fourteen distinct designations. All of the classifications are Federal Aid eligible except three: Urban Local, Rural Minor Collector, and Rural Local (codes 19, 08, and 09, respectively). Federal Aid (STP) may also be used for projects on Rural Minor Collectors (08) although they are not typically considered to be part of the Federal Aid eligible system. The respective classes and codes are shown below (the FHWA codes do not contain the urban/rural distinction).
(Source: https://www.dot.ny.gov/gisapps/functional-class-maps)



Town of Riverhead
Peconic River/Rt. 25 Corridor

NYS BOA Step II Nomination

FIGURE 3-12A

Transportation Network

Legend

- BOA Boundary

Major Roads

- Major Collector
- Interstate
- Minor Arterial
- Principal Arterial
- Traffic Signals
- Commuter Station

Note: Speed limits, (for example 30) in mile per hour are shown for main roads only.

Sources: ESRI WMS; Suffolk County; Town of Riverhead; NYS Orthophotography, 2013

1 inch = 1,800 feet

0 1,800 3,600 Feet

Traffic Flow Plan

The TOD Growth Plan for the Town of Riverhead included a Cumulative Traffic Impact Study to identify any traffic impacts that will be generated by the Base Conditions Scenario and subsequent Alternative Development Scenarios. The Base Condition Scenario traffic volumes were developed using the following factors: assume 80 percent of current vacant spaces within the downtown are occupied, include an increase in traffic due to general population growth, and add traffic from other planned projects.

The planning and revitalization efforts that are ongoing and planned for the Town of Riverhead within the downtown are expected to increase the existing population that inhabit new residences, increase economic activity in the form of additional commercial space, whether retail or restaurant uses, and attract visitors as a result of additional recreational opportunities all of which may in the number of trips within the Study Area. In the absence of adequate capacity, increases in trips could result in congestion, delay, and traffic safety concerns. The Base Scenario was used to analyze signalized and unsignalized intersections in the downtown area to determine the Level of Service (LOS) expected from future development within a revitalized Riverhead.

Under the Base Scenario, the traffic evaluation concluded that the following intersections would experience delays: West Main Street at Peconic Avenue, East Main Street at Roanoke Avenue, and the Roundabout at Peconic Avenue/CR 94/CR 63/CR 104/NYS 24. In order to address this delay, two different mitigation approaches were developed in order to improve traffic flow. The evaluation of the Base Scenario particularly focused on the need to improve flow at the Peconic Avenue/Roanoke/Main Street intersection, where traffic issues are in part due to the offset geometry, at this intersection. It is important to note that the majority of traffic traveling through this intersection is generally pass through traffic wherein the majority of trips traveling from the south through the intersection are destined for Old Country Road (CR58) to the north of the BOA Study Area. In general, the options offered as mitigation are as follows:

- Mitigation Option 1 involves making Peconic Avenue a one-way road northbound with provision for a southbound emergency lane. Because all non-emergency southbound traffic would need to cross the river at a different location, e.g., the Center Drive bridge, this option requires further analysis at intersections outside the downtown. Most of the current southbound traffic would be directed to the intersection of West Main Street and Court Street/Nugent Street, where another bridge crosses the river. Additional capacity on West Main Street can be accommodated with an additional through lane west of Griffing Avenue. As the intersection of Church Street and West Main Street is at an angle, the NYSDOT would require that geometric improvements be made to ensure this intersection functions well with additional volume.

- Mitigation Option 2 involves realignment of Peconic Avenue and Roanoke Avenue to eliminate the offset intersections of West Main Street at Peconic Avenue and East Main Street at Roanoke Avenue. This mitigation would not require any improvements at the intersection of West Main Street and Court Street and no rerouting of traffic volumes would be required; however, this Mitigation Option would require demolition of the structure opposite the northern terminus of Peconic Avenue and thus would require acquisition of private property for this purpose. The building is the Benjamin Block Building, constructed in 1913, and is a historic building contributing to the Main Street Historic District and the relocation of the structure or demolition would be an unavoidable impact of this option.

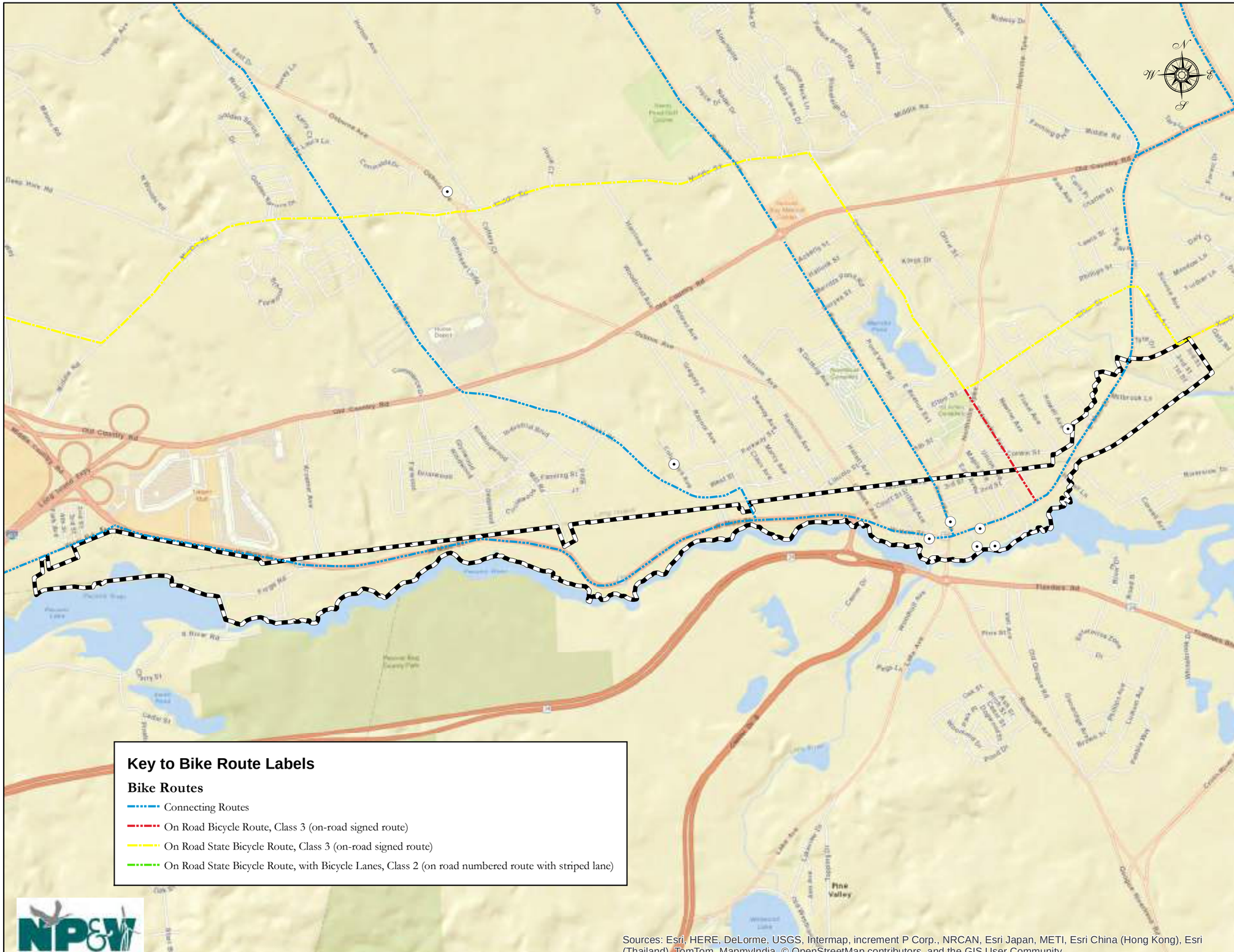
The traffic congestion centered on the Peconic/Roanoke and Main Street intersection could be a major obstacle to redevelopment and revitalization of the downtown area. **Section 4.3** provides recommended steps for implementation of the mitigation options.

Pedestrian and Bike Plan

The TOD Growth Plan (September 2015) includes an analysis of the pedestrian and bicycle amenities currently available in the Study Area. The Pedestrian Bike Plan, in conjunction with the Public Transit Plan, may encourage fewer trips by car and create a cohesive walking route that is very desirable in downtown settings. Pedestrian amenities, including marked crosswalks, sidewalks, pedestrian push buttons, and pedestrian signals with countdown timers, are critical to providing a safe means of travel for the walking patrons of downtown Riverhead. These pedestrian amenities support clearly defined and signed walking routes which give pedestrians confidence and a sense of safety. Increasing pedestrian connectivity can enhance the downtown area because patrons walking through the area may be more likely to visit the local restaurants, stores, and other attractions. Although many pedestrian amenities are already located in downtown Riverhead, there are numerous improvements that can be made to encourage and increase pedestrian activity. Sidewalks are provided for the majority of the downtown area; however several of the sidewalks are cracked or broken which creates an uneven walking surface and potential trip and fall hazards. New York State Department of Transportation recently completed a project which repaired and constructed new sidewalks along NYS Route 25. It is recommended that remaining damaged sidewalks be repaired in order to enhance pedestrian mobility and improve aesthetics.

Additional methods for increasing pedestrian activity include providing pedestrian push buttons and pedestrian signals with countdown timers at all signalized intersections. Currently, many older traffic signals are equipped with old-style push buttons and some intersections do not have any pedestrian accommodations. The TOD Growth Plan includes a list of recommendations for increasing pedestrian activity at 15 different locations within the BOA boundary. The recommendations include installing or updating crosswalks, sidewalks, pedestrian push buttons, and pedestrian signals with countdown timers, rapid flashing beacons at some existing pedestrian crossings, widening certain sidewalks, and providing signage and lighting for alleyways. A full list of the recommendations and specific locations can be found in the TOD Growth Plan.

Bicycle routes and amenities are illustrated on **Figure 3-12B**. Currently, the bicycle accommodations in Riverhead are limited. The only downtown location with a striped bicycle lane is the roadway which runs along Peconic Waterfront Park. Adding additional bicycle lanes to the downtown area may require widening roads or eliminating on-street parking which would not be practical or cost-effective. However, the area west of the downtown contains wide shoulders therefore the addition of bicycle lanes should be considered as this could encourage residents in the western portion of the Study Area to use bicycles as a way to travel throughout the area.



Town of Riverhead
Peconic River/Rt. 25 Corridor

NYS BOA Step II Nomination

FIGURE 3-12B

Bicycle Routes

Legend

BOA Boundary

Bicycle Racks

Sources: ESRI WMS; Suffolk County; Town of Riverhead

1 inch = 1,800 feet

0 1,800 3,600 Feet

There are some roads in the downtown that have small signs yet there is a need for uniform bicycle signage in order to develop a clear and efficient bicycle route. Some signs that contain only text should be upgraded to also include the bicycle symbol to increase awareness of bicycle paths. New development projects create opportunities for providing bicycle accommodations such as bicycle racks and lockers at new apartments, stores, and attractions. Adding secure bike storage should encourage more people to travel via bicycle. Bicycle accommodations should be continuously explored to gradually build up cycling features in the surrounding area which will promote and encourage cycling and hopefully have a positive impact on intersection delay and Level of Service by lowering motor vehicle usage/trips.

NP&V has developed recommendations for augmenting the on-street bicycle routes with bike paths on public property and on private lands where redevelopment could incorporate easements in the future. **Figure 3-12C** provides potential routes to provide additional options for consideration in planning off street bicycle routes/paths.

Public Transit Plan

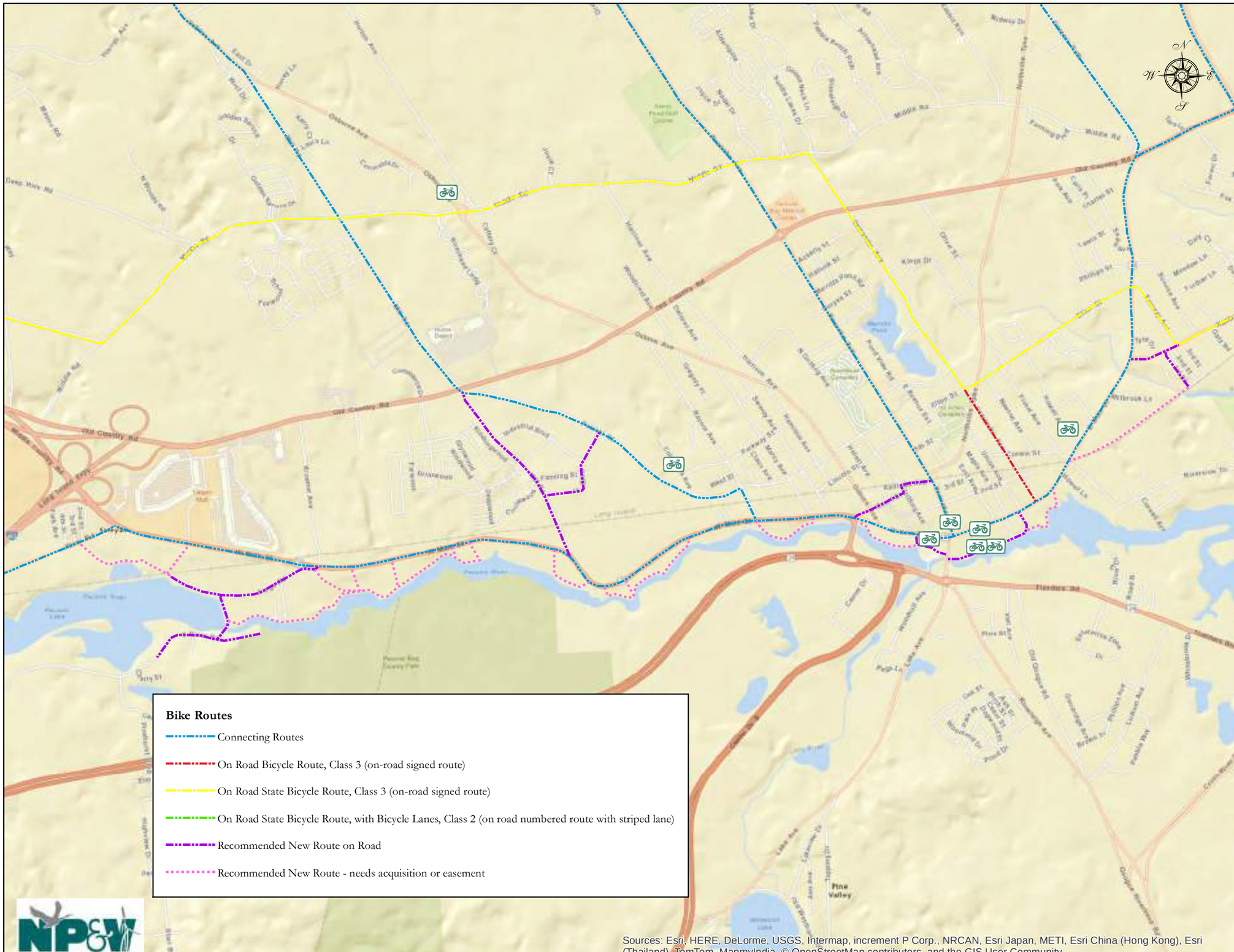
The TOD Growth Plan (September 2015) outlines existing local bus and train service and describes options for increasing ridership and service. **Figure 3-12D** illustrates the bus routes and stops as well as the railroad right-of-way and station. Increasing public transit ridership levels would have the beneficial effect of reducing vehicular trips, easing roadway congestion, and reducing parking demand. Within Riverhead, public transit is provided primarily by Suffolk County Transit and the Long Island Rail Road and ridership is low. Suffolk County Transit (SCT) operates six bus lines that service locations in and around downtown Riverhead. However, only one bus line operates on Sundays and many lines operate on reduced schedules on Saturdays. Currently, the bus service in the Riverhead downtown is not adequate due to lack of stops, long wait times, and limited schedules, and service should be modified or expanded based on future development of the Study Area. Ideally, bus service should be provided near residential and commercial uses where frequent ridership is anticipated. If the modification or addition of bus route is not feasible, then a local shuttle with frequent stops in the Riverhead downtown may be a suitable alternative. This would reduce the wait time and increase access for people visiting the downtown. Bus service is also provided to/from Manhattan, Melville, Ronkonkoma, Riverhead, and Southampton via 7Bus, a private company offering first class charter service several times a day at a competitive cost. With planning and increased ridership generated by visitors as well as residents, downtown Riverhead could become a destination for which 7Bus could provide direct service.

The Riverhead Long Island Rail Road station is located in downtown Riverhead on the north side of Railroad Street between Osborn Avenue and Griffing Avenue. The train station is also a stop for Suffolk County bus routes. The train schedules and bus schedules are not coordinated. The train station includes bike racks to promote bicycling as a mode of transportation.

While the majority of LIRR utilizes electric trains, the area east of Ronkonkoma including Yaphank, Riverhead and Greenport is served by diesel train. If people are traveling from Riverhead west through Ronkonkoma, they must switch stations at Ronkonkoma to board an electric train. This can increase wait and travel times which dissuades ridership, which is already

low in Riverhead. Another contributing factor to the low ridership in Riverhead is the infrequent train times. The current weekday schedule provides five trains daily for both eastbound and westbound travel while weekend and holiday service is limited to two trains per direction a day. According to the most recent ridership information available from the MTA/LIRR, at the Riverhead station, the overall ridership for an entire day is 52 patrons entering/exiting the trains. The infrequent service, arrival/departure times, and distance from other stations does not appeal to long distance commuters. Also, the even more limited service on the weekends does not promote downtown Riverhead as a day trip destination for possible visitors travelling by train.

Although there is a desire for transit oriented growth in downtown Riverhead, it is unlikely that the MTA will implement additional train service unless the demand for additional train service presents itself. However, as growth of the downtown and surrounding area occurs and a need for increased service is demonstrated, there is the potential to increase train and bus service within the area.



Town of Riverhead
Peconic River/Rt. 25 Corridor

NYS BOA Step II Nomination

FIGURE 3-12C
Recommended Expanded Bicycle Routes

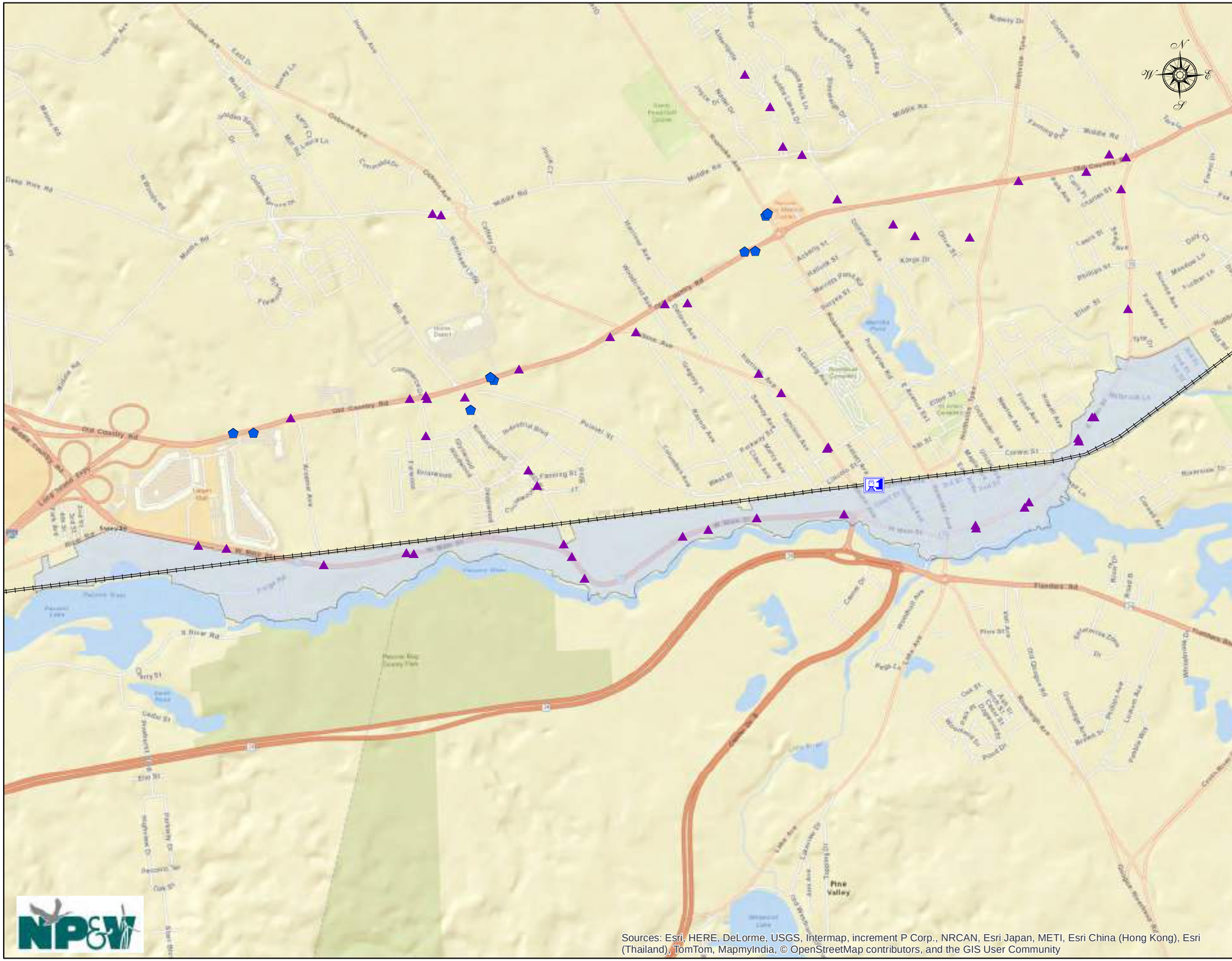
Legend

Bicycle Racks

Sources: ESRI WMS; Suffolk County; Town of Riverhead

1 inch = 1,800 feet

0 1,800 3,600 Feet



Town of Riverhead
Peconic River/Rt. 25 Corridor

NYS BOA Step II Nomination

FIGURE 3-12D
Bus and Rail Service

Legend

- BOA Boundary
- Commuter Station

Suffolk County Transit Bus

- Stop
- Shelter
- Railroad

Sources: ESRI WMS; Suffolk County; Town of Riverhead

1 inch = 1,800 feet

0 1,800 3,600 Feet

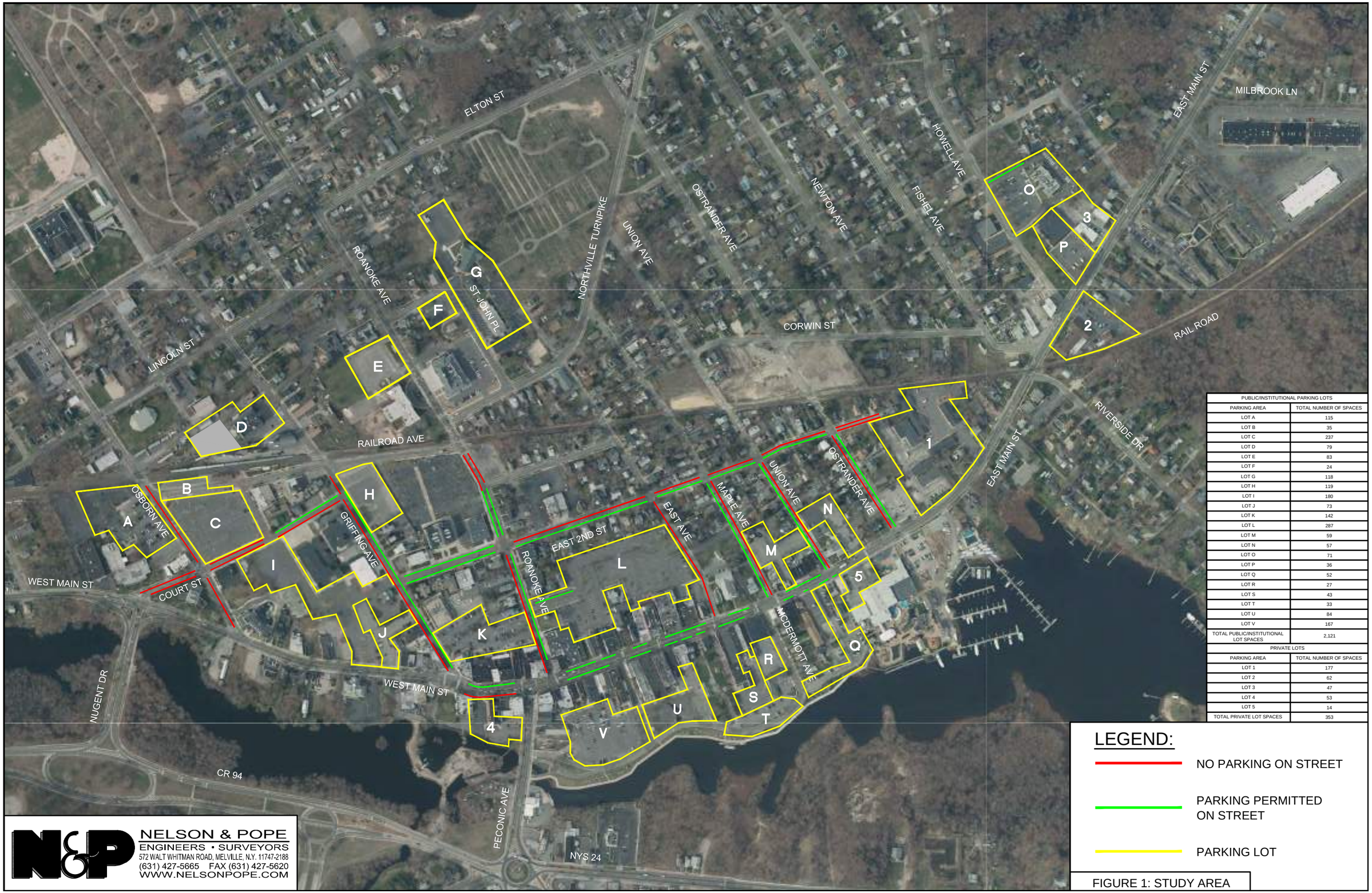
Parking Plan

As part of the Downtown Riverhead TOD Growth Plan, a parking utilization study was conducted to create an inventory of the parking supply and parking restrictions in the downtown area and understand utilization. The study identified the peak parking periods, peak occupancy by location, average parking duration, and turnover by location in order to determine how redevelopment could affect the parking supply. The study included an analysis of 22 public/institutional and five private parking areas and eight roadways where on-street parking is permitted. The current supply of parking in downtown Riverhead based upon the study consists of 2,121 public/institutional spaces, 353 private spaces, and 236 on-street spaces.

The map on the following page provides an overview of the parking available in downtown Riverhead. Out of the 2,710 parking spaces analyzed, the weekday peak occupancy was 1,290 spaces (48 percent) and the weekend peak occupancy was 516 spaces (19 percent). After reviewing field data and analyzing the parking accumulation, average duration, and turnover results, it was determined that under current conditions, only a few parking areas are highly utilized during the weekdays, mostly lots used by the Suffolk County Courts, Riverhead Town Hall, and Police Department. The majority of parking areas are highly underutilized on Saturdays.

From the review of the parking utilization study data, it appears that downtown Riverhead has adequate parking to support existing conditions. However, as empty buildings begin to fill and new development occurs (as envisioned under a future redevelopment scenario described in **Appendix I**), it was determined that an additional 1,197 parking spaces would be required to support additional demand[23]. The TOD Growth Plan includes improvement measures that could be considered to improve parking for the current and future conditions once redevelopment of the downtown occurs and parking demand increases. In order to provide an additional 1,197 spaces, the construction of at least one parking garage in the downtown, one which could feasibly be located in the parking lot on the north side of East Main Street between Roanoke Avenue and East Avenue. Additionally, in order for motorists to take full advantage of the provided parking, efficient signage must be utilized and the Plan recommends the updating of all parking signs within the downtown and including signage for spaces with time restrictions. Other improvements include installing asphalt pavement and formal parking space striping to provide a more uniform walking and parking surface, attempting to limit on-street parking along West/East Main Street to short durations to allow motorists that are passing through to utilize the downtown establishments, and encouraging employees to park in municipal or private lots rather that utilize on-street parking. Parking shuttles or public valets can also be considered to encourage better utilization of parking and promote connectivity of off-street parking facilities.

[23] This estimate provided for Alternative Development Scenario 2, which has a higher density of development than Scenario 3.



PUBLIC/INSTITUTIONAL PARKING LOTS	
PARKING AREA	TOTAL NUMBER OF SPACES
LOT A	115
LOT B	35
LOT C	237
LOT D	79
LOT E	83
LOT F	24
LOT G	118
LOT H	119
LOT I	180
LOT J	73
LOT K	142
LOT L	287
LOT M	59
LOT N	57
LOT O	71
LOT P	36
LOT Q	52
LOT R	27
LOT S	43
LOT T	33
LOT U	84
LOT V	167
TOTAL PUBLIC/INSTITUTIONAL LOT SPACES	2,121
PRIVATE LOTS	
PARKING AREA	TOTAL NUMBER OF SPACES
LOT 1	177
LOT 2	62
LOT 3	47
LOT 4	53
LOT 5	14
TOTAL PRIVATE LOT SPACES	353

FIGURE 1: STUDY AREA

G:\projects\12207\TRAFFIC\Parking Study1-10-14.dwg, XXX-X, 2/6/2014 2:21:52 PM, jdeluca, DWG To PDF.pc3, 1:2

3.2.8 Infrastructure

The Study Area is well served by existing infrastructure, including water, sewer, gas and electricity.

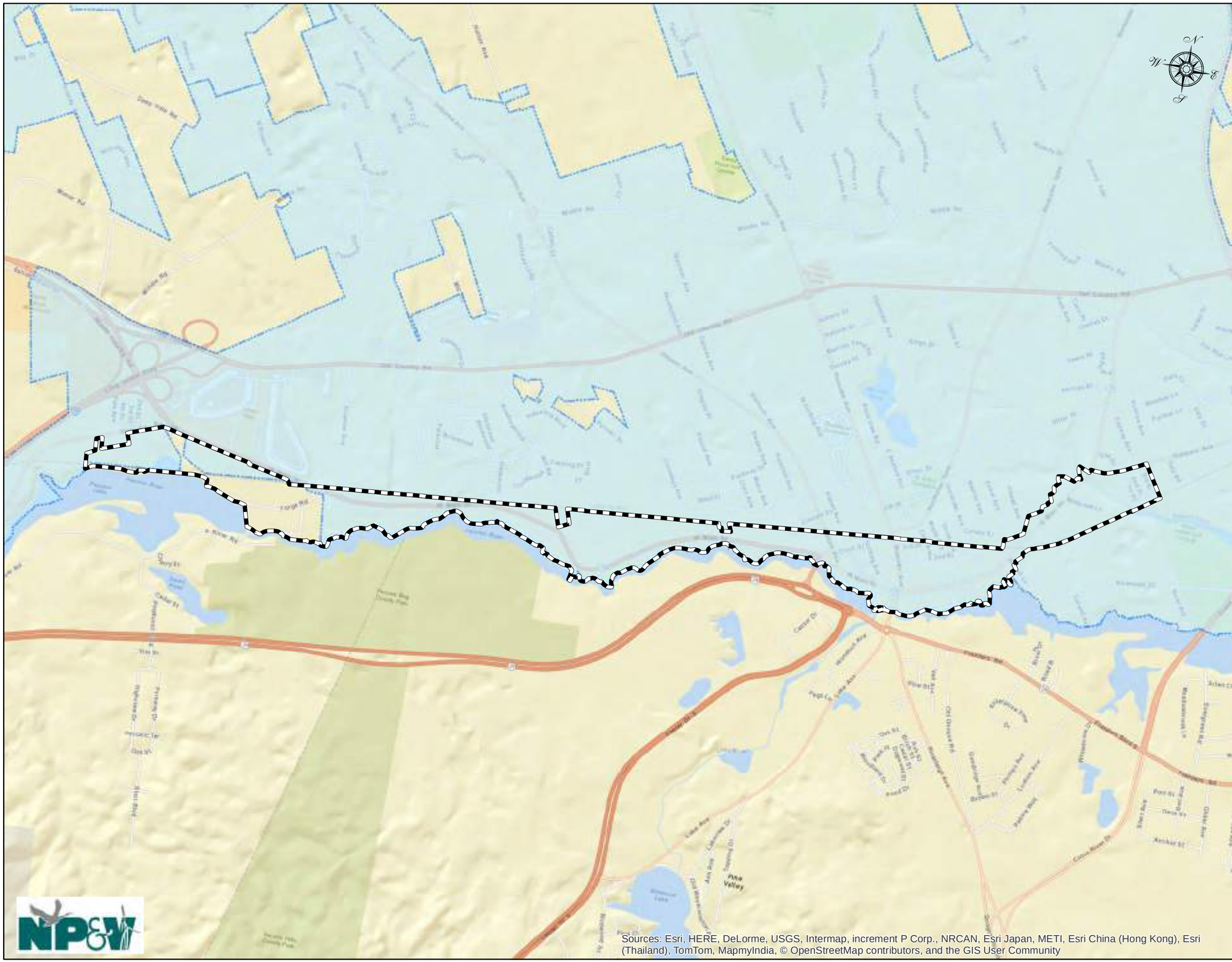
Water

The Town of Riverhead and the Riverhead Water District have demonstrated a strong commitment to providing high-quality drinking water and fire flow protection for its residents. The Town of Riverhead Comprehensive Plan, November 2003, included suggestions to ensure that the reliable, high-quality supply of drinking water is preserved in Riverhead. Specific suggestions include expanding the Riverhead Water District, continuing to monitor water quality, creating buffers around public wells to reduce negative impacts on well systems or groundwater, and properly building and siting wells to avoid negative impacts from nearby development.

As is shown in **Figure 3-13A**, almost the entire BOA Boundary is within the Riverhead Water District, except for two manufactured homes off of Forge Road served by private suppliers.

The water mains located along Route 25 in the BOA Study Area range in diameter from 6 to 12 inches. The water mains begin in the western section of the BOA Study Area at the intersection of Route 25 and Forge Road with a 12 inch diameter. The 12 inch diameter remains until there is a short segment of 8 inch diameter water mains at the intersection of Route 25 and Mill Road. Following the 8 inch segment is the 12 inch diameter until Winters Lane. Along Route 25 between Winters Lane and Raynor Avenue there is a short segment of 6” diameter water mains. From Raynor Avenue to Maple Avenue there is a long stretch of 10” water mains. From Maple Avenue until Route 25 crosses the Long Island Rail Road train tracks at Corwin Street, the water main diameter is 8”. After Corwin Street on Route 25, there is a 6” diameter water main until the eastern BOA boundary. Currently there are 1,526 fire hydrants located within the Riverhead Water District and over 70 fire hydrants are located within the BOA Study Area.

The water meets all federal and state drinking standards and it does not have the saltwater intrusion problems found in other parts of Long Island. The water supply from aquifers is sufficient to allow for continued growth. However, according to the 2003 Comprehensive Plan, the water district was planning on constructing additional water storage facilities and supply wells to handle the large water supply. Due to the large water supply, existing water mains and wells, and the ability to expand the water district facilities, water availability and access is not considered a constraint to development.



Town of Riverhead
Peconic River/Rt. 25 Corridor

NYS BOA Step II Nomination

FIGURE 3-13 A
Infrastructure Map: Water District

Legend

BOA Boundary

Water District Boundary

Sources: ESRI WMS; Riverhead Water District

1 inch = 2,000 feet

0 2,000 4,000 Feet

Sewage Treatment[24]

The Town of Riverhead Sewer District serves a portion of the BOA Study Area (see map at right and provided as **Figure 3-13B**) including the downtown and a portion of West Main Street. Outside the Study Area, it includes the majority of the Route 58 business corridor. The Sewage Treatment Plant (STP) is located at the north end of River Road and there are twelve (12) pump stations and approximately 25 miles of sewer mains that transport sewage to the plant. The STP provides tertiary treatment for nitrates and has a surface water discharge to the Peconic River located at the end of River Avenue.

The STP plant's permitted capacity is 1.2 million gallons per day (gpd) plus 100,000 gpd for the scavenger plant. The Riverhead Scavenger Waste Plant provides a disposal point for 100,000 gpd (for disposal by cesspool services)[25]. The STP also treats waste from pump-out boats on the Peconic River in downtown Riverhead (May thru September) and in East Creek in Jamesport at the NYS boat ramp (year-round service) that are town-owned and a service offered free to boaters. All property owners within the district pay sewer district taxes and there is a usage fee that is based upon water usage, since there are no individual meters for effluent flow[26]. Residential properties are charged the usage fee on a per gallon rate up to 100,000 gallons per year. The current flow at the STP is approximately 900,000 gpd, including 30,000 to 40,000 gpd of scavenger flow.

The Riverhead STP was built in 1937 as a primary treatment plant with chlorination for disinfection. It was upgraded to a secondary treatment in the 1950s with the installation of trickling filters. It was upgraded most recently in 2000 at a cost of $8.5 million to meet the DEC standards at that time, which included the installation of sequencing batch reactors (SBRs) and the use of ultraviolet light for disinfection. Additional upgrades are required to be consistent with the nitrogen TMDL[27] for the Peconic Estuary. The Town of Riverhead has made an application to the DEC[28] to meet the TMDL limits for total nitrogen, which will also allow an increase in the effluent flow capacity from 1.3 million gpd to 1.5 million gpd (including scavenger flow).

[24] Input for this section is based upon interviews held with Sewer District Commissioner Michael Reichel.
[25] The Town of Riverhead also owns the Riverhead Scavenger Waste plant. The scavenger waste plant treats waste from private and commercial septic systems or cesspools. Septic waste from the five East End towns and Eastern Brookhaven is transported to the plant by private haulers. The current dump fee is $.092 per gallon or $92.00 per thousand gallons (Source: Town of Riverhead Website).
[26] See §87 (Sewer Rents) of Town Code
[27] TMDL: Total Maximum Daily Load
[28] DEC Application ID: 1-4730-00039/00001

Town of Riverhead
Peconic River/Rt. 25 Corridor

NYS BOA Step II Nomination

FIGURE 3-13 B

Infrastructure Map: Sewer District

Legend

BOA Boundary

Riverhead Sewer District Boundary

Sources: ESRI WMS; Suffolk County Department of Health Services

1 inch = 2,000 feet

0 2,000 4,000 Feet

The Town of Riverhead has received a grant for $8.1 million from Suffolk County for upgrades to the plant which are federally mandated. However, the projected cost of the upgrades will be approximately $24 million and thus additional grant funding or low interest loans will be required to pay for the remainder of the project which is now about half complete.

One of the benefits of the upgrade will be the ability to utilize gray water for irrigation of the golf course which is adjacent to the sewer district property on River Avenue. This would have the benefit of diverting flow during the warmer months when nitrogen loading has the greatest impact on the Peconic Estuary. The golf course presently has an irrigation well which uses approximately 350,000 gpd seasonally. Once the nitrogen content of the effluent is less than 10 mg/L, gray water can be diverted from the effluent discharged to surface water of the Peconic River to trickling filter tanks for irrigation of the golf course. It is noted that the well water is high in iron content and results in discoloration of buildings and plants on the golf course, so the use of gray water will eliminate this situation. The gray water can also be utilized in the STP process for lime mixing (15,000 gpd), cleaning of the filter press (40,000 gpd) and other water used for wash down and the band screen. At present, water for these processes is potable water from the Riverhead water district and thus, this has the added benefits of reducing use of drinking water for maintenance and decreased costs to the district.

Several years ago, the Sewer District purchased a parcel on McDermott Avenue in the downtown (tax lot number 129-4-8) that is currently developed with a single family house (temporarily being used by a rowing club for storage). There is a small pump station on an adjacent property (lot 129-4-11).

Any expansions of the sewer district require approval of both the Town and NYSDEC. Recent expansions within the area include the provision of wastewater treatment to the Indigo Hotel which included providing sewage treatment for a portion of the Tanger Outlet Center. It is noted that all of Tanger II and the easternmost building of Tanger I were already previously sewered (as was the center directly east of Tanger II which contains Pottery Barn, Williams Sonoma and Office Max). This area is directly to the north of the BOA Study Area at the western end. While the Indigo Hotel property is located within the Sewer District, it was only recently connected to the district. To accomplish this connection, the hotel needed to obtain the connection through the Tanger I property and Tanger needed to grant an easement (as this was the only feasible connection route). As part of the agreement, Hotel Indigo agreed to pay for the connections for the northern and western buildings of Tanger I.

Along West Main Street, the district currently extends approximately 325 feet west of Raynor Avenue, and the sewer mains extend another ±275 feet west of the district line. There are numerous properties west of this boundary which would benefit from sewage treatment and treatment would have a beneficial impact to the water quality of the Peconic River. However, there are difficulties involved in extending the district farther to the west along West Main Street and options would need to be evaluated through the preparation of a feasibility study (to evaluate options and provide a cost/benefit analysis). The challenges for sewering in this area are the topography which gradually decreases between the pump station on the south side of West Main Street and Mill Road and high ground water. One solution could be the installation of a low pressure system which is less expensive initially, but requires that each property owner install

individual storage tanks/pump systems that connect to the sewer main. These systems are several thousand dollars and would need to be replaced periodically and thus, property owners decide not to connect to the district (while all property owners within a district pay the district tax, only those properties that are connected pay the usage fees - and unless a condition of site plan approval for new construction or expansion, connection is optional). It is expected that there will be resistance on the part of property owners to expand the district. Since the extension of the sewer district will have an environmental benefit, it is important that the majority of land owners connect - and thus it would need to be inexpensive for landowners - since the current cost of 'treatment' is limited to the fees for pumping out individual sanitary systems which is not mandated and thus only occurs when problems occur. Therefore, it is recommended that the feasibility study also evaluate costs for individual property owners and based upon input from property owners and case studies, identify a 'threshold cost' so that expected level of participation in the district can be projected. This would factor into the decision-making, since a certain level of participation is required to achieve sufficient benefit to warrant the extension.

There are several properties within the Study Area that have been identified as high priorities for connection to the sewer district (or provision of treatment using an alternative method). These properties have been identified as likely contributors of high nitrogen loads to the Peconic River (due to a number of factors such as density of development, year constructed, proximity to the river, and high groundwater).

Of particular interest is the mobile home park on Forge Road which consists of approximately 32 mobile homes on approximately 7.3 acres in an area where depth to groundwater ranges from less than one foot to two feet. This mobile home park is directly adjacent to the Peconic River and having been established prior to the adoption of Suffolk County Sanitary Code Article VI in 1981, it is expected that substandard disposal systems service the dwellings (e.g., lack of solid septic tank for solids removal, inadequate capacity, inadequate depth to groundwater).

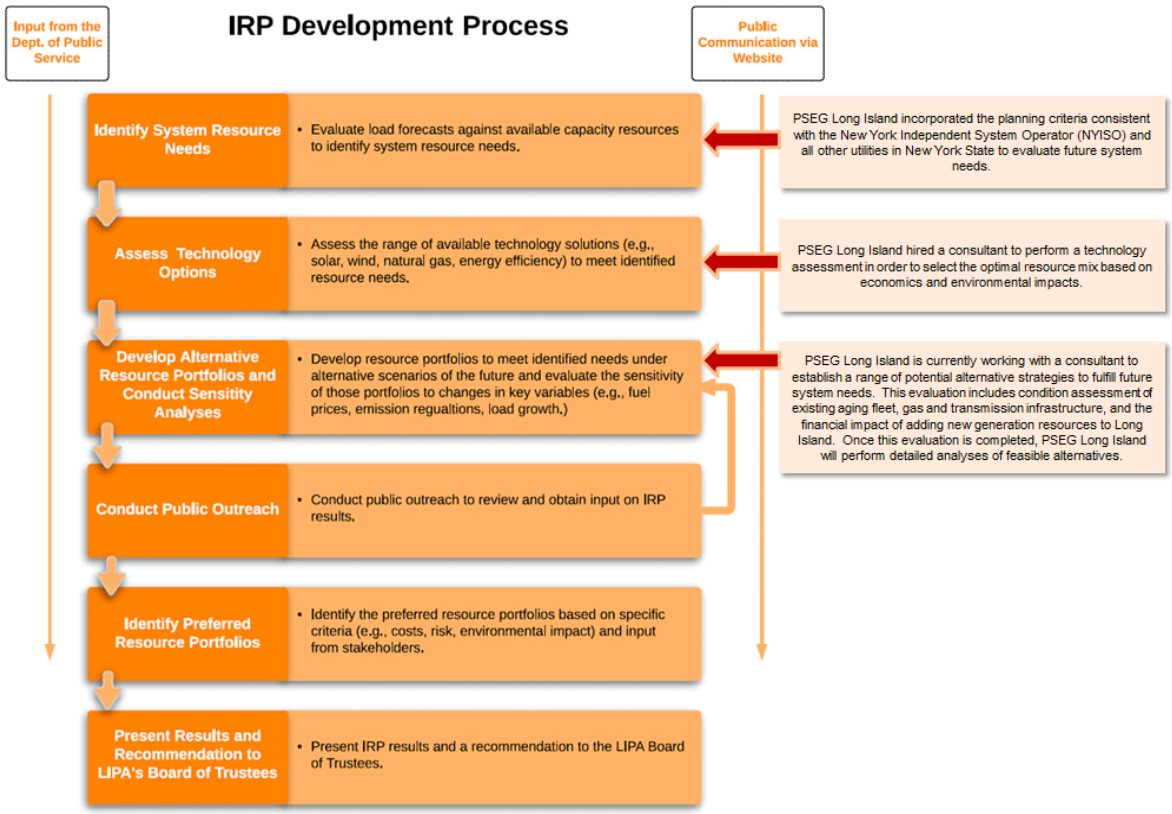
Since the depth to groundwater is less than three feet for the entire property, it is expected that the nitrification process is hampered resulting in less loss of gaseous nitrogen, and greater leaching of nitrogen to groundwater than would occur with a conventional system constructed to current standards and with at least 2-3 feet separation between

the bottom of the leaching pool and groundwater. This would result in less nitrogen removal and high concentrations of nitrogen in groundwater in close proximity to the Peconic River. In order to quantify this, the SONIR model was used to estimate the nitrogen load and concentration under current conditions, as compared with the load and concentration if wastewater treatment were provided. The model was adjusted to increase the gaseous nitrogen loss from the sanitary system from the typical 50 percent removal, to only 25 percent removal, or 75 percent leaching. This simulates the high groundwater, substandard sanitary system condition noted above. See **Appendix F** for the SONIR Model results and information regarding NP&V's mass balance model.

Based upon the results of the SONIR model, the current condition would result in a nitrogen load of 910.20 pounds per year (lbs/year), of which 822.49 lbs/year is due to sanitary system nitrogen. Using mass-balance analysis techniques, the predicted concentration of nitrogen in recharge is 20.34 mg/l for the existing development. Assuming that wastewater treatment is provided, the nitrogen load would decrease to 285.11 lbs/year, of which 197.40 lbs/year is due to sanitary system nitrogen. Using the same mass-balance analysis, the predicted concentration of nitrogen in recharge (if this wastewater were discharged on the site) would be 6.37 mg/l which. It is noted that the wastewater discharge may be at a remote location from the Study Area which would remove the nitrogen load completely from the site. If an existing permitted STP is used, the facility would be required to meet its discharge and flow limitations. Ultimately, removal of the sanitary nitrogen source from the Forge Road mobile home site along this segment of the Peconic River would be expected to be beneficial to river water quality. Based upon discussions with the Sewer District Commissioner, connection to this site could be achieved via force main along Kroemer Avenue with effluent pumped by gravity feed to a location on NY SR 25. A feasibility study would be required to understand the design issues and costs. In conclusion, if sewering were provided for this mobile home site, there would be a substantial decrease in nitrogen load and concentration of nitrogen in which would be expected to support water quality improvements due to existing excessive nitrogen loading.

Electricity and Natural Gas.

The Long Island Power Authority (LIPA) is the public entity that owns and manages the electricity grid that is now operated and managed by PSEG Long Island, the electricity service provider for the Study Area, and most of Long Island. PSEG Long Island is currently developing an Integrated Resource Plan (IRP), which is a plan for meeting a utility's future electric load forecast with additions and innovations on both the supply and demand sides. As part of this effort, all of LIPA's current power resources will be examined and a variety of potential future improvements considered to meet Long Island's growing need for power. The graphic below describes the development process of an IRP and the current status.



Source: https://www.psegliny.com/page.cfm/AboutUs/CurrentInitiatives/IRP (graphic downloaded July 2015)

Gas distribution is provided by National Grid. Natural gas is available on Main Street in Riverhead; it is noted that while National Grid does not commit to providing natural gas until an application is submitted, as a general rule and assuming available capacity, National Grid will install at no charge, 100 feet of new main in the roadway and up to 100 feet into a property for an extension request.

Stormwater

To reduce the water quality impacts caused by storm sewer system discharges, the USEPA and the NYSDEC have adopted stormwater management regulations that require operators of municipal separate storm sewer systems (MS4s) [29] to implement comprehensive programs that are designed to reduce and prevent the flow of pollutants to surface waters from storm sewers. The Town of Riverhead is a regulated MS4 and has been implementing a multi-faceted stormwater program for over ten years. It is noted that while the management of stormwater has been an aspect of public works since the beginning of civilization, the focus on stormwater runoff as a topic of national concern with respect to water quality is relatively recent - specifically, the small MS4 regulations were not adopted until 1999 and these did not come into effect in 2003.

[29] A Municipal Separate Storm Sewer System (or MS4) is a conveyance or system of conveyances that is owned by a state, city, town, village, or other public entity that discharges to "waters of the United States" and designed or used to collect or convey stormwater (including storm drains, pipes, ditches, etc.). Stormwater runoff is commonly conveyed via MS4s into local waterbodies.

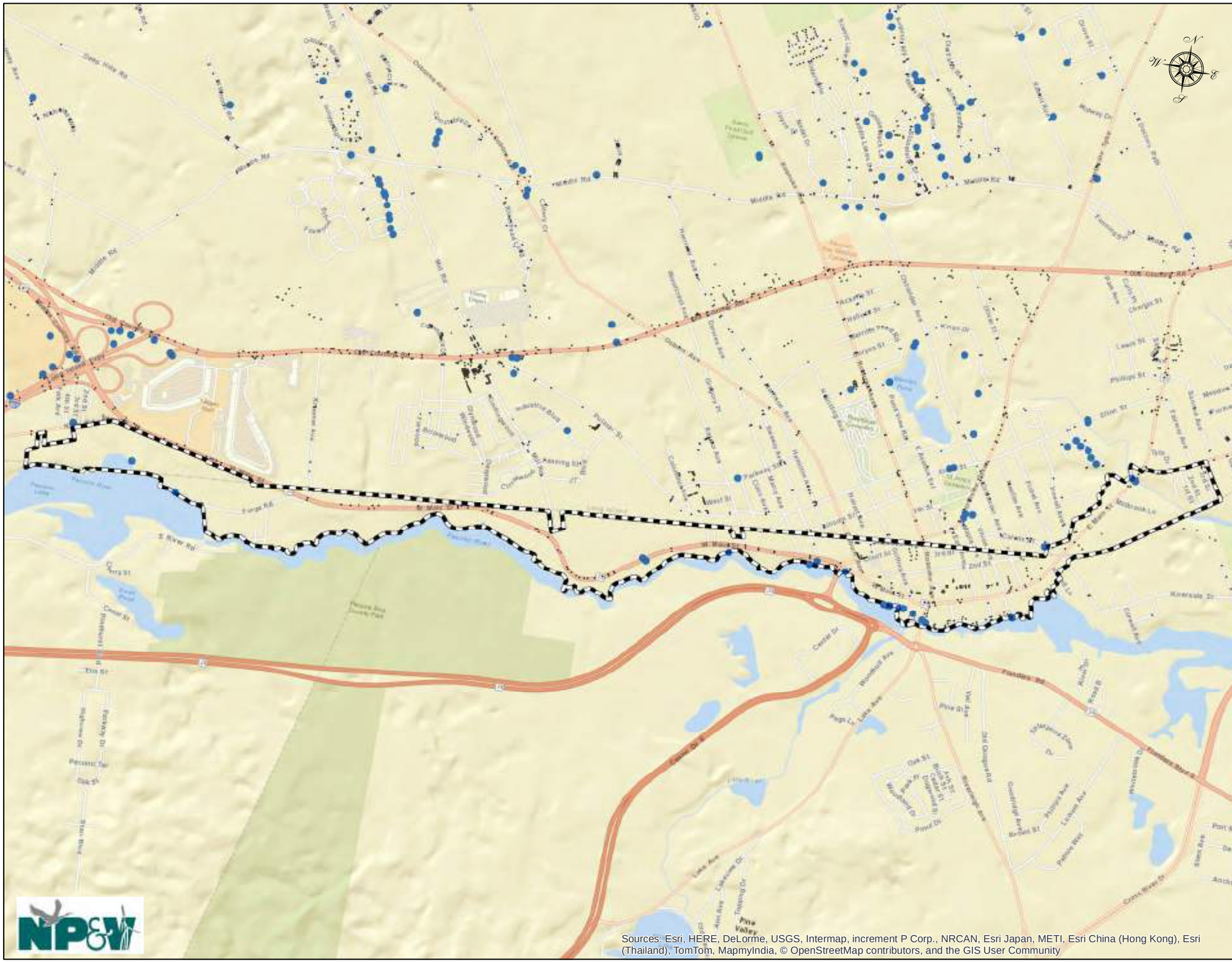
Stormwater has the potential to convey a variety of contaminants, such as excess fertilizer, pet waste, sediment, toxic substances, and debris, untreated to the Peconic River and can contribute to water quality issues and have serious impacts on fish and wildlife. Polluted runoff increases with development and impervious surfaces, which impede infiltration of rain water into the soil. In developed areas, constructed storm sewer systems (pipes, ditches, drains, swales, outfalls) convey stormwater to recharge areas and surface waters in order to prevent flooding and unsafe travel conditions. In the Study Area, stormwater is managed with a network of catch basins, leaching catch basins, connecting pipes, and outfall pipes (**see Figure 3-13C**). There are no recharge basins within the Study Area and thus the majority of runoff is either directly recharged in catch basins with overflow to the Peconic River/Estuary. As a member of the Peconic Inter-municipal Protection Committee the Town of Riverhead will improve the effectiveness and efficiency of its stormwater management efforts. Its initiatives include public education and engagement programs, municipal facility pollution prevention measures, attention to illegal connections and dumping, storm sewer system retrofits, local laws, oversight of construction activity and erosion controls, and policies to reduce the ongoing impacts of development on water quality.

The Riverhead BOA program presents excellent opportunities to advance Peconic water quality protection goals through the implementation of green infrastructure practices. Re-development designs that include rain gardens, vegetated swales, pervious pavements, green roofs, and buffers can greatly reduce the pollutants that reach the Peconic River via runoff.

The entire BOA Study Area was reviewed for potential "Green Infrastructure" opportunities. Emphasis was conducted on publicly owned parcels of land; however, some private properties that that could provide a significant positive impact in reducing pollutants were considered. Recommendations for green infrastructure were assessed by the ability of a property to have a high attenuation of pollutants primarily by observing how the runoff generated on-site was directed towards existing stormwater structures. The topography, amount of impervious surfaces and potential for direct drainage to the Peconic River were the main assessment criterion. The locations that have highest potential to attenuate pollutants are further developed in Section 4.2.2 with preliminary pollutant reduction analysis provided.

The benefits of installing these recommended green infrastructure practices that capture the water quality volume[1] of water from storm events will provide the ability to significantly reduce all direct pollutant discharges to the Peconic River. Pathogens, heavy metals, and hydrocarbons can be nearly entirely attenuated in the bio-retention basins, swales and tree trenches prior to entering either the Peconic River or groundwater. Nutrients in stormwater will be utilized by plants, preventing direct discharge to the Peconic River and thereby significantly reducing the nitrogen loading to groundwater and eventually the Peconic River.

Other benefits associated with the installation of green infrastructure is a reduction of water volume within the stormwater system which can locally ease some flooding in key locations as well as direct that water into the groundwater for recharge.



Town of Riverhead
Peconic River/Rt. 25 Corridor

NYS BOA Step II Nomination

FIGURE 3-13 C

Infrastructure Map: Stormwater

Legend

BOA Boundary

Drainage Structures

- Catch Basin/Leaching Pools
- Drainage Inlet
- Outfall

Sources: ESRI WMS; Riverhead GIS Data

1 inch = 1,800 feet

0 2,000 4,000 Feet

3.2.9 Natural Resources and Environmental Features

Natural resources and open space can provide a benefit to redevelopment of BOA sites as these spaces are attractive to residents, businesses and tourists. The following identifies natural resources and dedicated open space within the Study Area. Dedicated open space may include properties which remain in an undeveloped state, as well as properties which have been improved for parkland and waterfront access.

The BOA Study Area contains numerous publicly owned parcels (**Figure 3-10**), some of which are considered preserved open space, and a few are accessible for passive recreation. Weeping Willow Park, Grangebel Park, Riverfront Park, and the Peconic River Canoe Launch are available for active use. Publicly owned parcels located in the eastern portion of the Study Area primarily consist of parking areas and other public amenities; no public undeveloped land is located within the east portion of the Study Area. The western portion of the Study Area contains three Town owned (±9.8 acres total) and ten County owned (±57.4 acres total) vacant undeveloped parcels. It is noted that the westernmost County owned parcel within the Study Area is the site of a former duck farm.

Sensitive Species

The New York Natural Heritage Program (NYNHP) provides an inventory of significant natural communities, and this resource was consulted to determine proximate communities to the Study Area. The NYHNP identifies no significant natural communities within the Study Area[30].

The NYNHP was contacted directly to inquire into specific known occurrences of rare, threatened or endangered species or communities within the Study Area. The information provided by the NYNHP can be found in **Appendix G**. The NYNHP identified four rare, threatened or endangered animals, four significant natural communities and seven current records of rare, threatened or endangered plants in or within the vicinity of the Study Area. Four historical records of rare, threatened or endangered animals were identified while 30 different historical records of rare, threatened or endangered plants were identified.

Article 11 of the NYS Environmental Conservation Law (ECL) provides protection for rare, threatened and endangered species. As the NYNHP identified the potential presence of several such species in the vicinity of the Study Area, it will be necessary to survey individual sites prior to development/redevelopment to determine the presence or absence of the identified species, should appropriate habitat on the individual site be present. It is noted that if any of the endangered or threatened animals listed in the NYNHP letter are identified on or within the vicinity of the site, a NYSDEC Article 11 permit may be required prior to the commencement of any activities. Alternatively, redevelopment plans may need to be altered to protect habitat associated with a protected species.

If a rare, threatened or endangered species is present, redevelopment at a site may be limited as Article 11 is designed to protect populations of these species. Activities requiring an Article 11 permit may include construction noise, clearing of land, installation of infrastructure,

[30] It is noted that several significant natural communities south of the Study Area, south of the Peconic River. A small significant natural community (identified as Coastal Plain Pond Shore) is located north of the Study Area.

construction of new structures, and other alterations of species habitat. The presence of these species may limit redevelopment as certain species have strict requirements for habitat preservation (such as the eastern Tiger Salamander), and site plans would need to consider the species habitat needs.

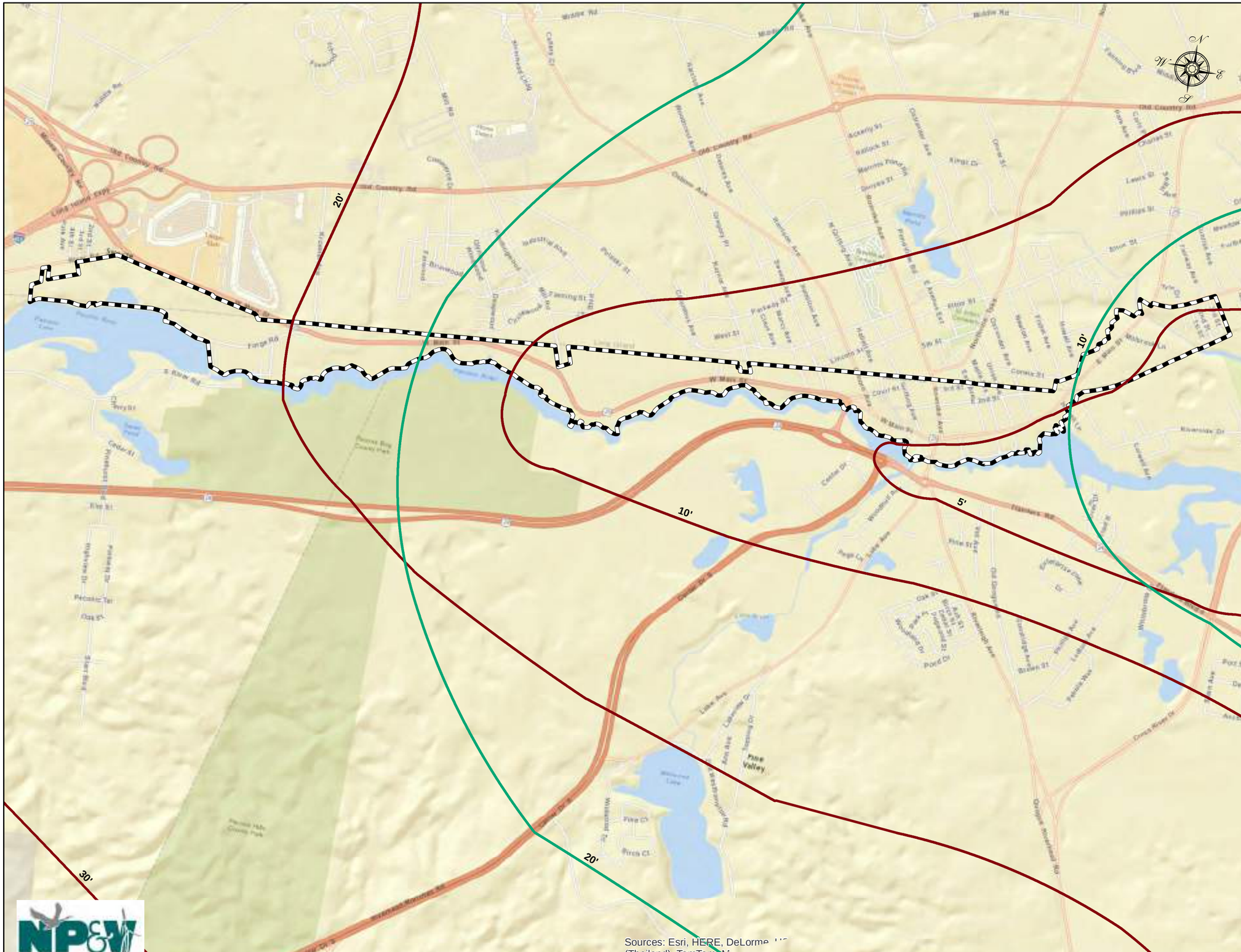
Groundwater

Figure 3-14 depicts regional groundwater elevations. Groundwater decreases in elevation travelling from west to east. Groundwater elevations in the western portion of the Study Area are approximately 20 feet above sea level (asl) while the elevation decreases to 10 feet asl in the eastern portion of the Study Area. It is noted that the topographic elevation within the Study Area ranges from 0 to approximately 40 feet asl, indicating that there are areas with shallow depth to groundwater (i.e., less than 8 feet). These areas are depicted in **Figure 3-15**.

The majority of the Study Area is located within the 0-2 year groundwater contributing area identified in the Suffolk County Comprehensive Water Resources Management Plan. This means that water entering the ground either from precipitation or input through sanitary systems will take between 0 and 2 years to reach the surface waters of the Peconic River.

Article 6 of Suffolk County Sanitary Code (SCSC), enacted in 1980, limits density of development based upon sanitary flow for un-sewered areas. The western portion of the Study Area is located within Groundwater Management Zone III which limits sanitary flow to 300 gallons per day per 40,000 SF. The eastern portion of the Study Area is located within Groundwater Management Zone IV, which limits sanitary flow to 600 gallons per day per 40,000 SF. Article 6 of the SCSC is designed to protect groundwater by limiting inputs to the aquifer from sanitary systems. As a result, a set of design standards were generated to ensure that sanitary systems are designed to minimize inputs of pollutants to groundwater. The design standards mainly provide constraints to the installation of basements and sanitary systems within the Study Area as the majority of the Study Area is situated in areas with shallow depth to groundwater as a two foot separation distance from the bottom of a sanitary structure to groundwater is required. Areas with shallow depth to groundwater may face obstacles during development if a sanitary system cannot be designed that fits the Suffolk County Department of Health Services Design Criteria. This restriction would need to be reviewed on a case by case basis during the development/redevelopment process.

Properties developed prior to 1981 may have sanitary systems that are not in compliance with current design standards, and as a result may be significant contributors of pollution to the Peconic River (the mobile home park located on Forge Road which has greater density that permitted, is located within an area with shallow depth to groundwater, and is not connected to the sewer system, for example). NP&V has used spatial analysis to identify areas where the depth to groundwater is less than eight feet, which may be used to identify properties whose sanitary systems are potentially not functioning properly due to a lack of a minimum of two feet of separation distance from the bottom of the system to groundwater. Such areas are depicted in **Figure 3-15**. These areas are ideal for providing sewer infrastructure as any sanitary system located in such an area will not provide the same level of pollutant removal as that of sanitary wastewater treated at a sewage treatment plant.



Town of Riverhead
Peconic River/Rt. 25 Corridor

NYS BOA Step II Nomination

FIGURE 3-14
Groundwater Elevations

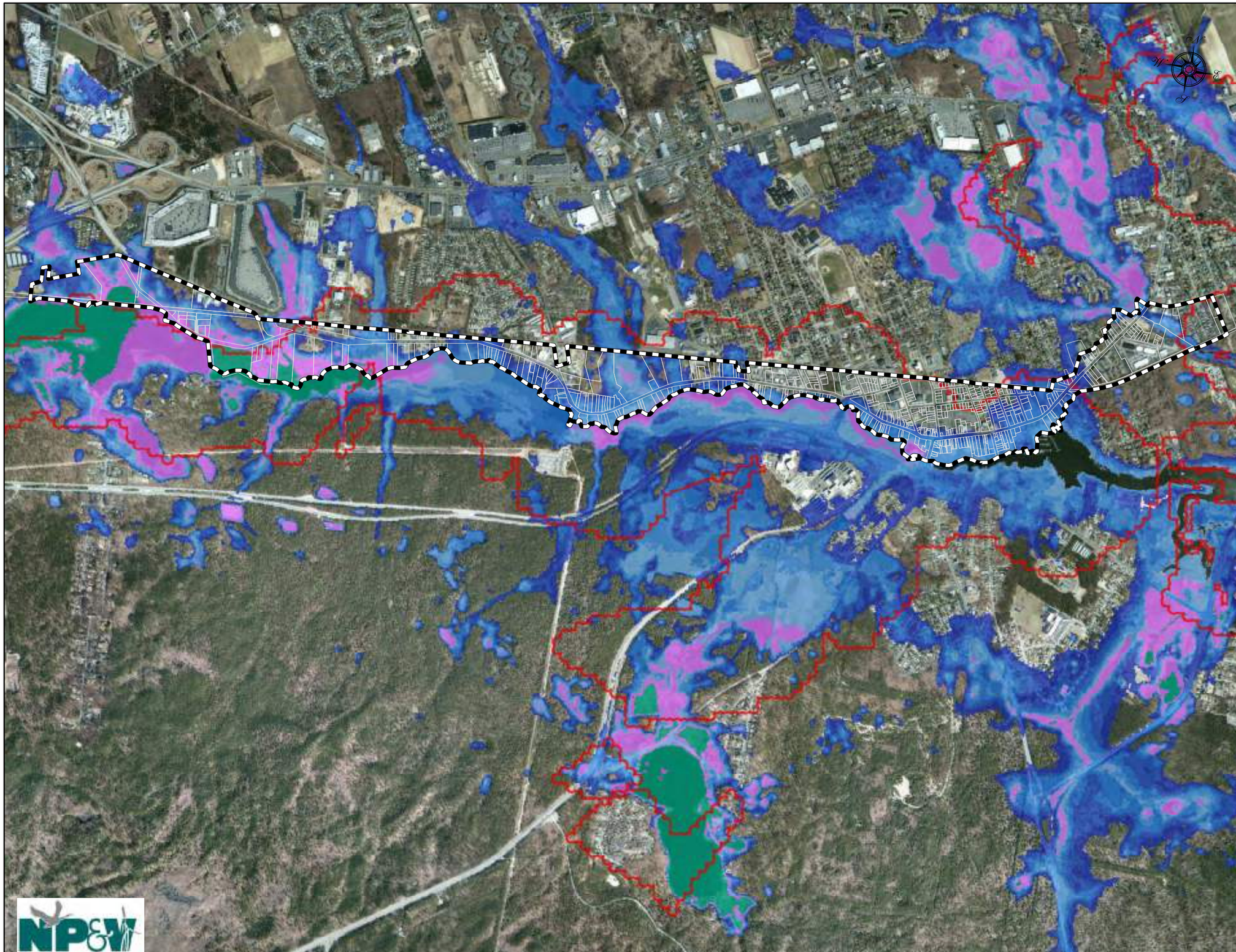
Legend

- BOA Boundary
- Magothy Aquifer Contours
- Upper Glacial Water Table Contours

Sources: ESRI WMS; USGS Water Resource Investigations Report, 2010

1 inch = 1,800 feet

0 2,000 4,000 Feet



Town of Riverhead
Peconic River/Rt. 25 Corridor

NYS BOA Step II Nomination

FIGURE 3-15
Depth to Groundwater

Legend

- BOA Boundary
- Parcels
- 0-2 Year Groundwater Contributing Area

Depth to Water Table (feet)

- Surface Water and Wetlands
- Under Water or No Depth to Groundwater
- 0.01 - 2
- 2.1 - 4
- 4.1 - 6
- 6.1 - 8
- 8.1 - 10
- >10

Sources: Suffolk County; NYS GIS; NYSDEC; USGS

1 inch = 1,800 feet

0 1,800 3,600 Feet

While sewers serve some of the area (see **Figure 3-12B**), many uses that have a significant contribution of sanitary wastewater to the aquifer (such as the mobile home park - as discussed in **Section 3.2.8**) are not served by sewers. As a result, expansion of the existing sewer infrastructure or the creation of community systems that serve targeted areas would be beneficial to water quality and reduction of nitrogen and pathogen input to the Peconic River.

Surface Waters

Surface waters within the Study Area include four streams tributary to the Peconic River and the Peconic River itself. The NYSDEC assigns classification standards to indicate the best usage of an identified waterbody. The Peconic River and all tributary streams are classified as "C" waters until it passes under Peconic Avenue, where the stream becomes classified as "SC" waters. Definitions for water classifications are as follows:

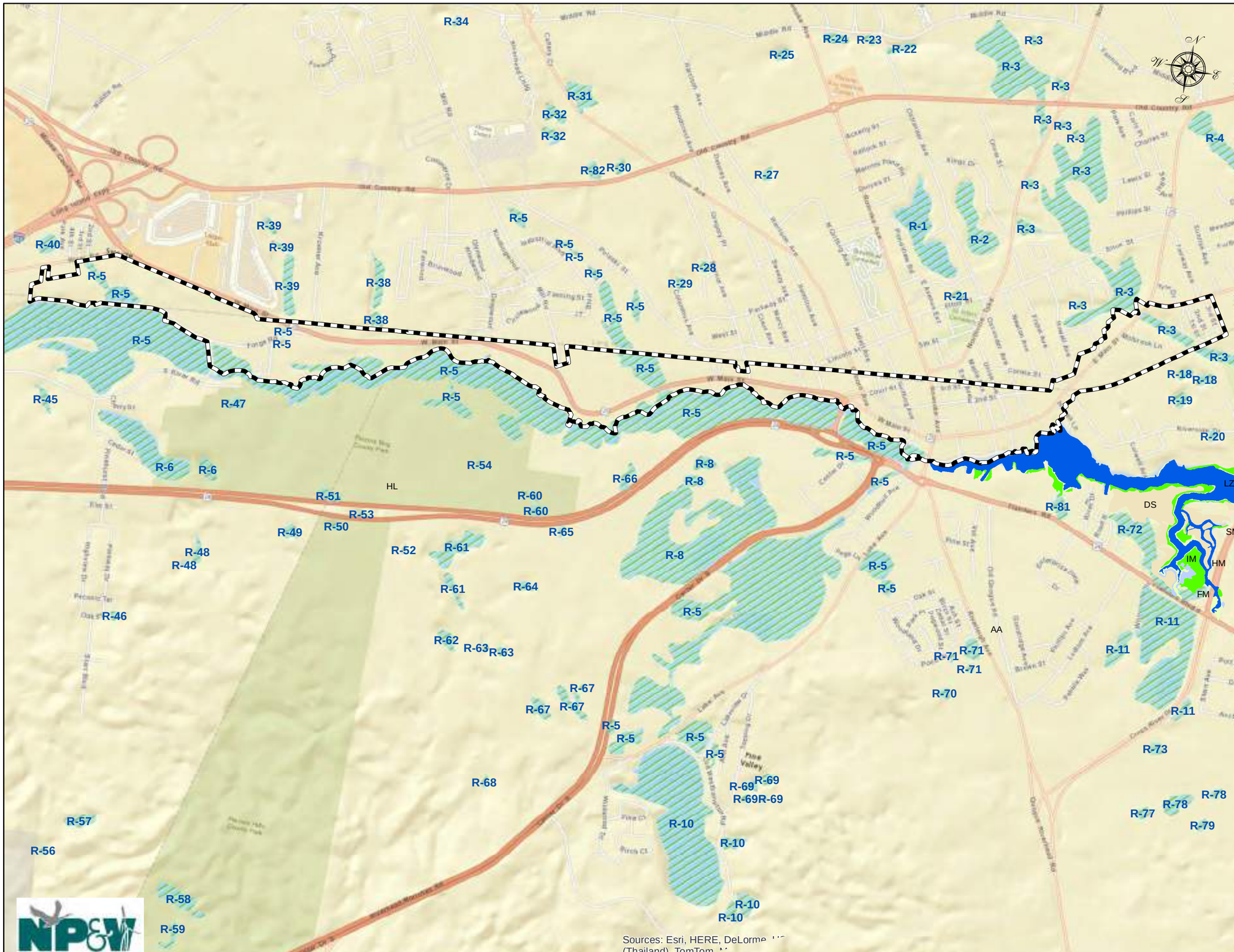
- C waters - freshwaters identified as "Suitable for fish, shellfish and wildlife propagation and survival. Also, for primary and secondary contact recreation, although other factors may limit the use for these purposes,"
- SC waters - marine waters identified as "Suitable for fish, shellfish and wildlife propagation and survival. Also, suitable for primary and secondary contact recreation, although other factors may limit the use for these purposes."

Shellfish closures exist in the area of the Peconic Estuary east of Peconic Avenue. This area, designated as part of the Flanders Bay shellfish area, is permanently closed due to high levels of fecal coliform detected in the water.

The Peconic Estuary and portions of the Peconic River are identified on the New York State 303(d) list as impaired due to high levels of nitrogen and high levels of pathogens. Data reviewed from Suffolk County sampling stations indicates pathogen levels regularly exceed NYS water quality thresholds. Under the most stringent thresholds (those for shellfish) fecal coliforms are not to exceed 14 MPN/100 ml[31] and the geometric mean of all samples is not to exceed 49 MPN/100 ml. Similarly, total coliforms should not exceed 70 MPN/100 ml for a single sample and 10 percent of the samples may not exceed 330 MPN/100 ml. Nitrogen levels exceed the Peconic Estuary Program's recommended limit of 0.45 mg/l. Average nitrogen levels reached as high as 19.37 mg/l. All but one station sampled for routinely exceeded the recommended nitrogen limit. **Table 3-6** below summarizes the water quality data for each sampling station. Sampling stations are depicted in **Figure 3-17.**

Flanders Bay is included within the Pathogen TMDL[32] for Peconic Bay. Flanders Bay was estimated to have coliform contributions from several STPs (Riverhead STP, Brookhaven National Lab STP and the NWIRP Calverton STP), as well as contributions from Town stormwater systems and privately owned lands. Overall, the estimated pathogen load to Flanders Bay was 773,119 billion Fecal Coliform per year (FC/yr). The TMDL recommended a reduction goal of 74 percent for Flanders Bay, which, if achieved, would result in 547,600 billion fewer FC/yr entering the waterbody.

[31] most probable number (**MPN**) of coliform per **100 ml**
[32] TMDL: Total Maximum Daily Load



Sources: Esri, HERE, DeLorme, ... (Thailand), TomTom, ...

Town of Riverhead
Peconic River/Rt. 25 Corridor

NYS BOA Step II Nomination

FIGURE 3-16

Wetlands

Legend

- BOA Boundary
- NYSDEC Tidal Wetlands
  - DS - Dredge Spoil
  - FM - Fresh Marsh
  - HM - High Marsh
  - IM - Intertidal Marsh
  - LZ - Littoral Zone
- NYSDEC Freshwater Wetlands

Sources: ESRI WMS; NYSDEC

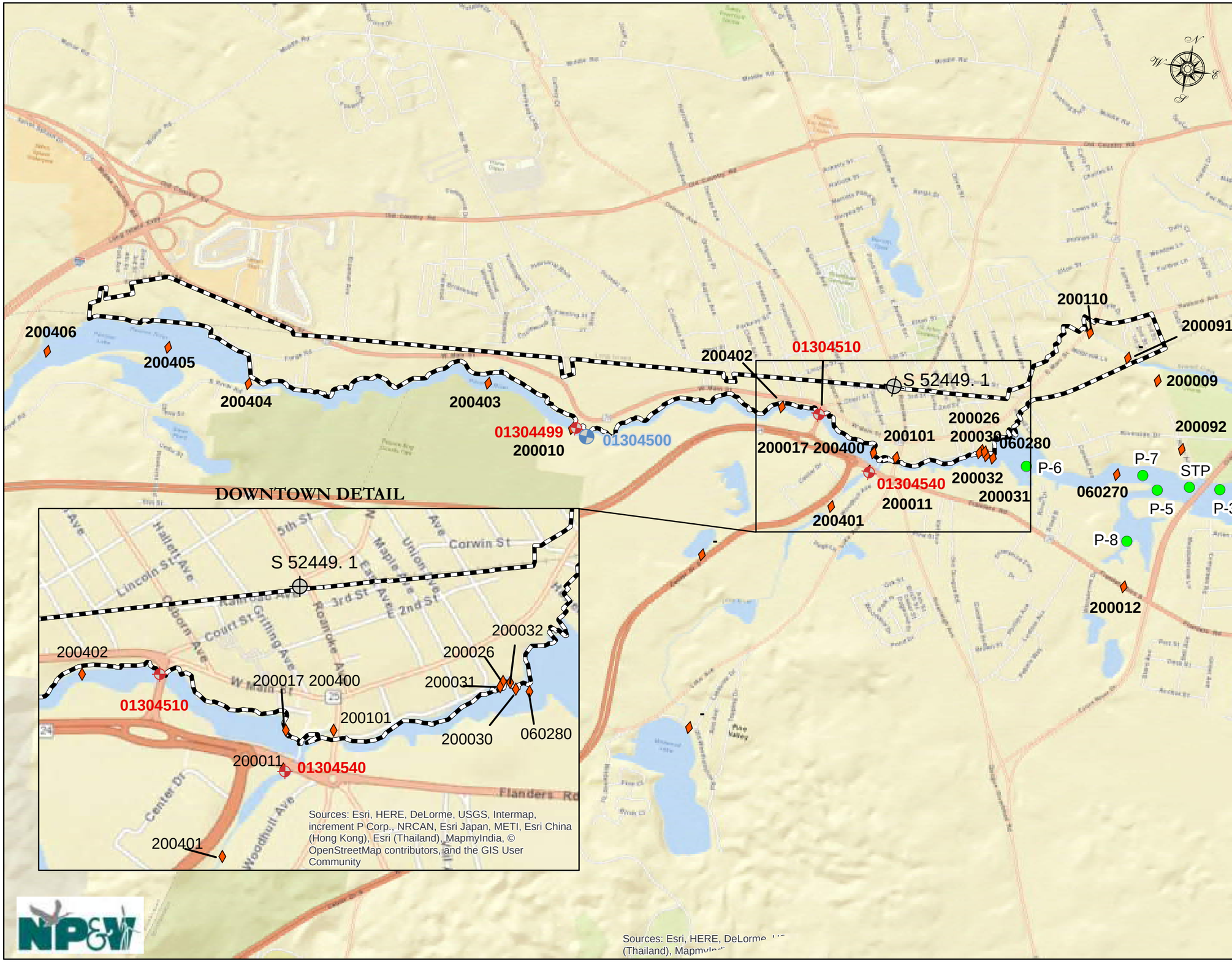
1 inch = 1,800 feet

0 2,000 4,000 Feet

Town of Riverhead
Peconic River/Rt. 25 Corridor

NYS BOA Step II
Nomination

FIGURE 3-17
Surface Water Quality Sampling Stations



Legend

- USGS Active Groundwater Station
- USGS Active Surface Water Stations
- USGS Inactive Surface Water Stations
- Suffolk County Sampling Stations
- NYSDEC Sampling Station
- NYSDEC Sampling Station w/YSI
- BOA Boundary

Sources: ESRI WMS; NYSDEC

1 inch = 2,000 feet

0 2,000 4,000 Feet

TABLE 3-6
WATER QUALITY DATA SUMMARY

Station	Date Range for Samples	Sampling Timeframe (Years)	Number of Samples for Coliforms	Geometric Mean of Total Coliform (MPN/100 ml) (Regulatory limit of 330 MPN/ml)	Geometric Mean of Fecal Coliform (MPN/100 ml) (Regulatory limit of 49 MPN/ml)	Number of Samples for Nitrogen	Average Total Nitrogen (mg/l) (PEP limit of 0.45 mg/l)
200010	7/20/1976 - 12/16/2014	38.43	335	252.67	85.84	68	0.41
200017	8/28/1989 - 12/16/2014	25.32	280	464.26	165.92	48	0.48
200026	7/25/2001 - 12/15/2014	13.40	63	1,792.80	1,084.84	56	3.33
200030	1/28/2005 - 12/15/2014	9.88	48	195.22	76.37	33	0.92
200031	11/28/2005 - 4/8/2009	3.36	13	1,085.52	514.54	13	2.17
200032	11/28/2005 - 4/8/2009	3.36	12	1,165.46	1,012.64	12	19.37
200101	6/22/1987 - 9/18/1989	2.24	7	539.25	124.14	0	N/A
200110	7/20/1976 - 12/16/2014	38.43	102	795.65	188.89	71	0.87
200402	5/22/2002 - 11/25/2002	0.51	2	592.45	124.10	0	N/A
200403	5/22/2002 - 11/25/2003	0.51	2	302.99	40.00	0	N/A
200404	3/6/1996 - 3/20/1996	0.04	2	93.81	18.44	0	N/A
200405	5/22/2002 - 11/25/2002	0.51	2	99.50	28.28	0	N/A
200406	5/22/2002 - 11/25/2003	0.51	2	193.39	46.90	0	N/A
060280	7/20/1976 - 9/18/1989	13.17	75	637.45	199.16	63	0.95

Note: all values in red exceed the regulatory standard shown in the table heading.

Similarly, Flanders Bay is included in the Nitrogen TMDL[33] for Peconic Bay. The estimated daily load allocation of Total Nitrogen (TN) into the bay ranged from 620 to 644 lbs/day (i.e. load under typical conditions), while the maximum daily allocation ranged from 2,298 to 3,265 lbs/day. A 37 percent reduction goal for average daily TN input was allocated for Flanders Bay, while a maximum reduction goal of 32.5 percent was allocated in the TMDL.

The NYSDEC MS4 (Municipal Separate Storm Systems) General Permit 0-10-002 lists Flanders Bay as being located within a Pathogen Impaired Watershed and a Nitrogen Impaired Watershed[34]. This permit requires a 98 percent pathogen load reduction and a 15 percent nitrogen load reduction by March 9, 2021.

While the MS4 regulations only apply to municipally-owned stormwater infrastructure, the regulations provided in the General Permit can be utilized as guidelines by the Town in reviewing redevelopment projects within the Study Area. To aid in reduction of nitrogen and pathogen inputs to the Peconic River, the Town should require the use of low-impact development techniques for any proposed redevelopment project. Such techniques include use

[33] Total Maximum Daily Load for Nitrogen in the Peconic Estuary Program Study Area, Including Waterbodies Currently Impaired Due to Low Dissolved Oxygen: the Lower Peconic River and Tidal Tributaries; Western Flanders Bay and Lower Sawmill Creek; and Meetinghouse Creek, Terrys Creek and Tributaries
[34] Appendices 6, 7, & 8 of the General Permit

of green stormwater infrastructure (bio-retention areas, rain gardens, etc.), use of permeable pavers or other pervious surfaces, provision of natural buffers, particularly in areas in close proximity to wetlands, use of green roofs, use of native species in landscaping, and limiting the use of fertilizer on sites. All of these techniques aid in reducing pollutants that enter the river, and would therefore aid in meeting both the nitrogen and pathogen reduction goals for the river. **Section 4.0** includes recommendations for specific locations where rain gardens/bioswales could achieve pollutant reductions in stormwater and reduce the impact on wetlands and surface waters.

Flooding

Figure 3-18 illustrates those areas which are within Special Flood Hazard Areas (SFHAs) as identified by the Federal Emergency Management Agency (FEMA). Each flood zone identifies the areas in terms of risk of flooding.

Within the Study Area, there are three designations; Zone AE (which provides base flood elevations), Zone A (no base flood elevations determined), and Zone X (areas of 0.2% chance annual flood, areas of 1% annual chance of flood with average depths of less than 1 foot or with drainage areas less than 1 square mile, areas protected by levees from 1% annual chance flood and areas outside the 0.2% annual chance floodplain). Zone A and AE represent the 100-year floodplain, and Zone X represents the 500-year floodplain.

The floodplain within the Study Area is associated with the Peconic River and Sawmill Creek. The floodplain encroaches and constrains development on certain properties that are on the south side of Forge Road and Middle Country Road – many of those properties are already in private ownership. The 100-year floodplain also encroaches on the rear of properties on the south side of Main Street between its intersections with Osborn Avenue and Howell Lane, within downtown Riverhead.

Portion of Flood Map 36103C0466H for downtown Riverhead
Source: Fema.gov

Town of Riverhead
Peconic River/Rt. 25 Corridor

NYS BOA Step II Nomination

FIGURE 3-18

FEMA Flood Zones

Legend

- BOA Boundary
- Parcels

FEMA Flood Zone

- A
- AE
- X, 0.2 PCT ANNUAL CHANCE FLOOD HAZARD

Source: FEMA

1 inch = 1,800 feet

0 1,800 3,600 Feet

Flooding conditions, including more frequent inundation, can be expected in areas adjacent to the Peconic River, Sawmill Creek which will be exacerbated by climate change. There is much scientific evidence that shows that the Earth's climate is changing. Global sea level rose about 17 centimeters (6.7 inches) in the last century. The rate in the last decade, however, is nearly double that of the last century.[35] In New York State, sea levels are rising, worsening the risks from coastal floods and storm surges. Intense precipitation events are more common, and so are long dry spells.

The New York State Community Risk and Resiliency Act (CRRA) now requires that applicants that apply for permits or that seek funding from certain State programs demonstrate that they have taken into account future physical climate risks caused by storm surges, sea-level rise or flooding. The CRRA applies to specific State permitting, funding and regulatory decisions, including smart growth assessments; funding for wastewater treatment plants; siting of hazardous waste facilities; design and construction of petroleum and chemical bulk storage facilities; oil and gas drilling, and State acquisition of open space. One method of evaluating areas in the Study Area that may be most impacted by flooding is to review areas that were impacted by Hurricane Sandy[36] using the Sea Level Rise Planning Tool[37] created by NOAA in partnership with FEMA, USACE, USGCRP, and CEQ. The maps that result from use of the tool combine FEMA flood hazard data with four scenarios of potential sea level rise from two peer-reviewed reports, including a NOAA-led interagency report on global sea level rise scenarios and a report by the New York City Panel on Climate Change. The four scenarios address different factors that could affect sea level rise, including ocean warming and the melting of mountain glaciers and ice sheets. Sea level rise is projected for the years 2050 and 2100 based upon current trends in the absence of a collective effort to reduce greenhouse gas emissions. The excerpt below is from the Sea Level Rise mapper for the year 2050 showing special flood hazard areas at low, intermediate low, intermediate high and highest change in sea level (which ranges from +0.3’ for the lowest and +2.0’ for the highest global scenarios).

[35] Source: Commonwealth Scientific and Industrial Research Organization, Australia.
[36] Super Storm Sandy occurred on October 30, 2012.
[37] The mapping tool can be accessed at the website:
http://geoplatform.maps.arcgis.com/home/item.html?id=2960f1e066544582ae0f0d988ccb3d27.

Another tool is being developed and is available for review at the NOAA page found here: https://coast.noaa.gov/slr/. The purpose of the data viewer is to provide a preliminary view of sea level rise and coastal flooding impacts. According to this website, the viewer is a screening-level tool that uses nationally consistent data sets and analyses. Data and maps can be used at several scales to help gauge trends and prioritize actions for different scenarios. The sea level rise tab provides a map tool which allows one to visualize sea level rise. The slider bar provides the differences in inundation levels at one foot to six foot sea level rise over existing "mean higher high water", or the highest high tides. It is important to note that the mapper, including the data, maps, and information associated with it should be used only as a screening-level tool for general planning purposes.

Because of the BOA Study Area's location along the Peconic River, which is especially tidally influenced including within the vicinity of downtown Riverhead, it is important to recognize that actions will need to be evaluated to ensure that any new improvements consider the implications of sea level rise.

Wetlands

Freshwater and tidal wetlands located within or surrounding the Study Area are depicted in **Figure 3-16**. Several freshwater wetland areas are located within or adjacent to the Study Area, and tidal wetlands are located adjacent to the southeastern boundary of the Study Area. There are no tidal wetlands located within the Study Area, however, as there are wetlands adjacent to the south, development may be subject to the regulations discussed below. The majority of the freshwater wetlands are associated with NYS Freshwater wetland system R-5, with the exception of the freshwater wetlands located in the eastern portion of the Study Area, which contains wetland system R-3.

The NYSDEC regulates freshwater wetlands under Article 24 and tidal wetlands under Article 25 of the Environmental Conservation Law (ECL). The NYSDEC has jurisdiction within 100 feet of freshwater wetlands. Tidal wetlands jurisdiction varies depending on the site conditions, however, jurisdiction generally extends 300 feet from the tidal wetland boundary, not to extend past the 10 foot contour, or up to the top of a bluff. Wetland area use prohibitions, generally compatible uses and guidelines for improvements are provided in 6 NYCRR Part 661 and Part 663.

NYSDEC Article 24 regulates setbacks from freshwater wetlands including the installation of sanitary systems, drywells, impervious area and proximity of structures to the wetland. Similarly, NYSDEC Article 25 regulates setbacks from tidal wetland areas for sanitary systems (100 feet), drainage structures (100 feet), buildings, driveways, patios, etc. (75 feet) and restricts impervious cover within the adjacent area to 20 percent. Cursory review of developed parcels within the watershed indicate that many of the properties were developed prior to the enactment of Article 24 (May 1980) and Article 25 (August 1977), and therefore do not comply with the standards. This may provide a barrier to redevelopment as the NYSDEC looks to have redevelopment conform to regulations, and therefore may reduce overall developable area on a parcel.

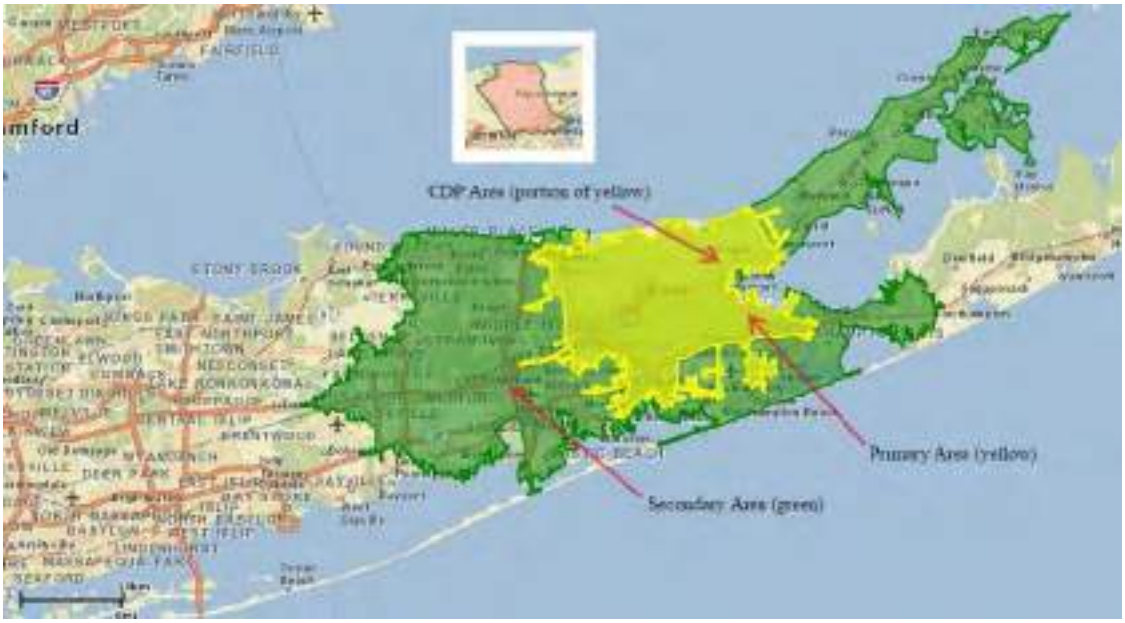
Invasive Species

The portion of the Peconic River that borders the Study Area has been infested with water primrose (*Ludwigia peploides*) since prior to 2003, when it was first identified. This species is a floating plant that grows quickly and densely, creating a hindrance to recreation, fish passage, native plants, and biodiversity. This species spreads by fragmentation of the stems which float to a new location for propagation. The NYSDEC has been conducting hand removal of the species from the river through the use of staff and volunteers, however, the species continues to spread. Additional resources are necessary to effectively control the spread of this species.

The continued presence of this species within the river could pose a barrier to redevelopment, as this species decreases recreational opportunities and value, as well as decreasing the value of the natural resources within the river itself. Should this portion of the river become un-navigable due to the density of the plant, the redevelopment potential of individual sites may be reduced due to the reduced opportunity for recreation and use of the river. As a result, continued management of this species would aid in encouraging redevelopment.

3.3 Demographics

This section provides a summary of the socioeconomic characteristics of residents, demographic trends, housing stock, and household incomes of the immediate area as well as primary and secondary market areas to help inform economic redevelopment decisions made through the BOA process. These demographics are also useful for providing data to developers and business interests in recruiting new businesses to the area. Census data for the Riverhead CDP are provided, as well as for the local (primary) and regional (secondary) market areas. Where appropriate, comparisons are made between the areas, Suffolk County, New York and United States. The target market areas were developed to understand the characteristics of nearby populations as well as to analyze retail needs and demands of the local (primary) and regional (secondary) market areas. Finally, ESRI Tapestry segment reports were prepared for the target market areas which are summarized towards the end of this section. Tapestry segments describe common characteristics of the major population groups within the regions selected. (It is noted that NP&V also obtained Tapestry information for other market areas – namely potential "Day Trippers" to assist in identifying target populations and identifying potential niche markets in the future which are utilized in the economic and market trends analysis). A map and description of the geographic areas are provided below.



Geographic Area Notes:

- Riverhead CDP: Riverhead Census Designated Place (CDP) as designated by U.S. Census Bureau and is shown on the inset map within the map above.
- Primary Market Area: The primary market area is defined as an average 15-minute drive time radius which was calculated through the ESRI Business Analyst program[38] and shown in yellow on the map above.
- Secondary Market Area: The secondary market area is defined as an average 30-minute drive time radius and was augmented to include the entire north fork of Long Island and Shelter Island. While the 30-minute drive time only extended as far east as Southold hamlet, an examination of current market conditions indicate that residents of the entire north fork and Shelter Island travel to Riverhead for the majority of their goods and

[38] The methods utilized by ESRI to determine how drive times are calculated has been refined which has led to slight changes in the Primary and Secondary Market Areas since the report last revised January 15, 2014.

services. Therefore, the secondary market area boundary was extended to include North Fork communities and Shelter Island and show in green on the map above.

Population Change

The historic and projected population changes for the Riverhead CDP, Primary Market, and Secondary Market areas are presented in **Table 3-7**. Population growth in Riverhead CDP has outpaced the growth of both the Primary Market and Secondary Market areas as population grew from 10,513 in 2000 to 13,299 in 2010, representing a growth of 26.5 percent during this 10 year period. The population of the Primary Market and Secondary Market areas grew by 19.1 percent and 10.0 percent from 2000 to 2010. The average annual change in population for CDP Riverhead, Primary Market and Secondary Market was 2.4 percent, 1.7 percent, and 1.0 percent from 2000 to 2010. Growth rates are projected to slow significantly from 2010 to 2020. The total population of Riverhead CDP is projected to be 13,607 in 2020, a growth of only 308 persons. This projection does not account for the specific projects planned for the area, nor does it account for recent building that occurred since 2010.

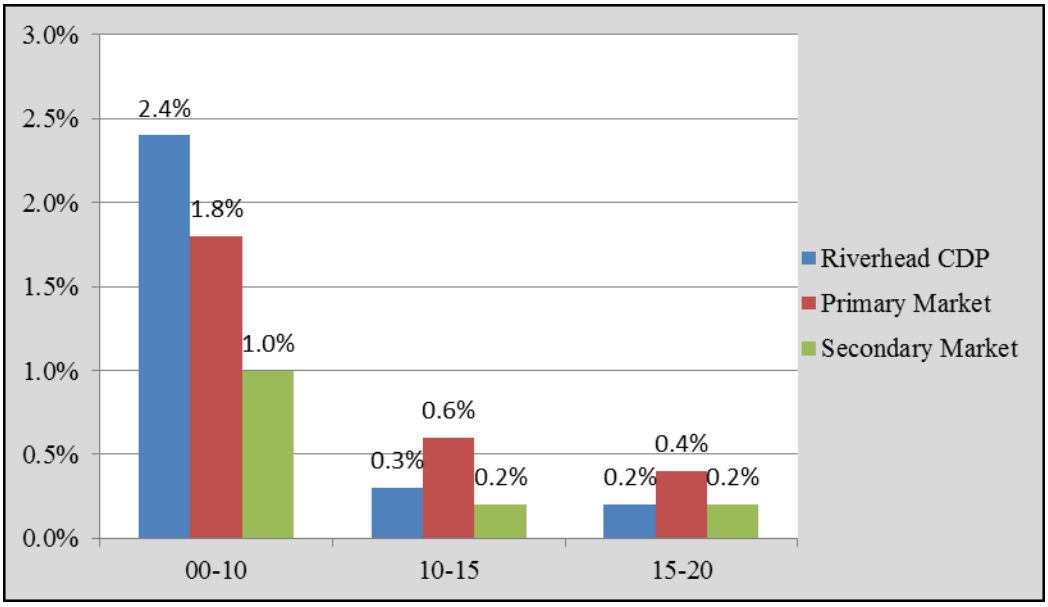
TABLE 3-7
TOTAL POPULATION AND PROJECTIONS, 2000-2020

	Census	Census	Projection	
Geographic Area	2000	2010	2015	2020
Riverhead CDP	10,513	13,299	13,496	13,607
Primary Market	42,326	50,409	51,848	52,829
Secondary Market	403,627	445,142	450,718	455,613
				Change in Population
Geographic Area	~	2000-2010	2010-2015	2015-2020
Riverhead CDP		2,786	197	111
Primary Market		8,083	1,439	981
Secondary Market		41,515	5,576	4,895
				Percent Change
Geographic Area	~	2000-2010	2010-2015	2015-2020
Riverhead CDP		26.5%	1.5%	0.8%
Primary Market		19.1%	2.9%	1.9%
Secondary Market		10.0%	1.3%	1.1%
				Average Annual Change
Geographic Area	~	2000-2010	2010-2015	2015-2020
Riverhead CDP		2.4%	0.3%	0.2%
Primary Market		1.7%	0.6%	0.4%
Secondary Market		1.0%	0.2%	0.2%

The rate of annual change for Riverhead CDP is projected to decrease from 2.4% annually to only 0.3 % and 0.2 % annually by 2015 and 2020, respectively. The average annual change in the population in the Primary Market Area is projected to decrease from 1.8% growth annually to about 0.4% between 2010 and 2020, while annual growth in the Secondary Market Area is expected to decrease from 1.0% to 0.2% during the same time period. The demographic data presented in **Chart 3-1** shows that there was a high level of growth between 2000 and 2010, but

that the growth has slowed since 2010, likely as a result of the national economic recession, and that it is expected to remain slow through 2020. It is important to note that the growth levels affect the needs for such resources as housing and community services (and therefore the Town will have limited additional demand for housing and services than as compared to the 2000 to 2010 period). Projections such as those summarized in Chart 3-1 reflect the likely trend assuming that the same amount of housing development which occurred in the previous ten years continues. However, actual population growth will reflect real time market supply and demand which in turn is the result of developer preferences and where they are willing to construct. Regardless of the population projections, population and housing growth could be higher if a developer procures reasonably priced land and the zoning allows a housing density which reflects a good return on the investment. A developer can further be enticed to an area if a municipality incentivizes development. For example, there are many municipalities which are selling underutilized parking areas and other lands at a discounted price and as part of master developer agreements, and those properties are programmed for large housing and mixed use projects. The availability of existing water and sewer infrastructure, and establishment of shovel ready sites (analyzing potential impacts through a GEIS) help to shorten the development review process which is attractive to investment. It is important to lay the groundwork to attract sought after housing beyond that which is projected in Chart 3-1.

CHART 3-1
AVERAGE ANNUAL CHANGE IN POPULATION 2000-2020

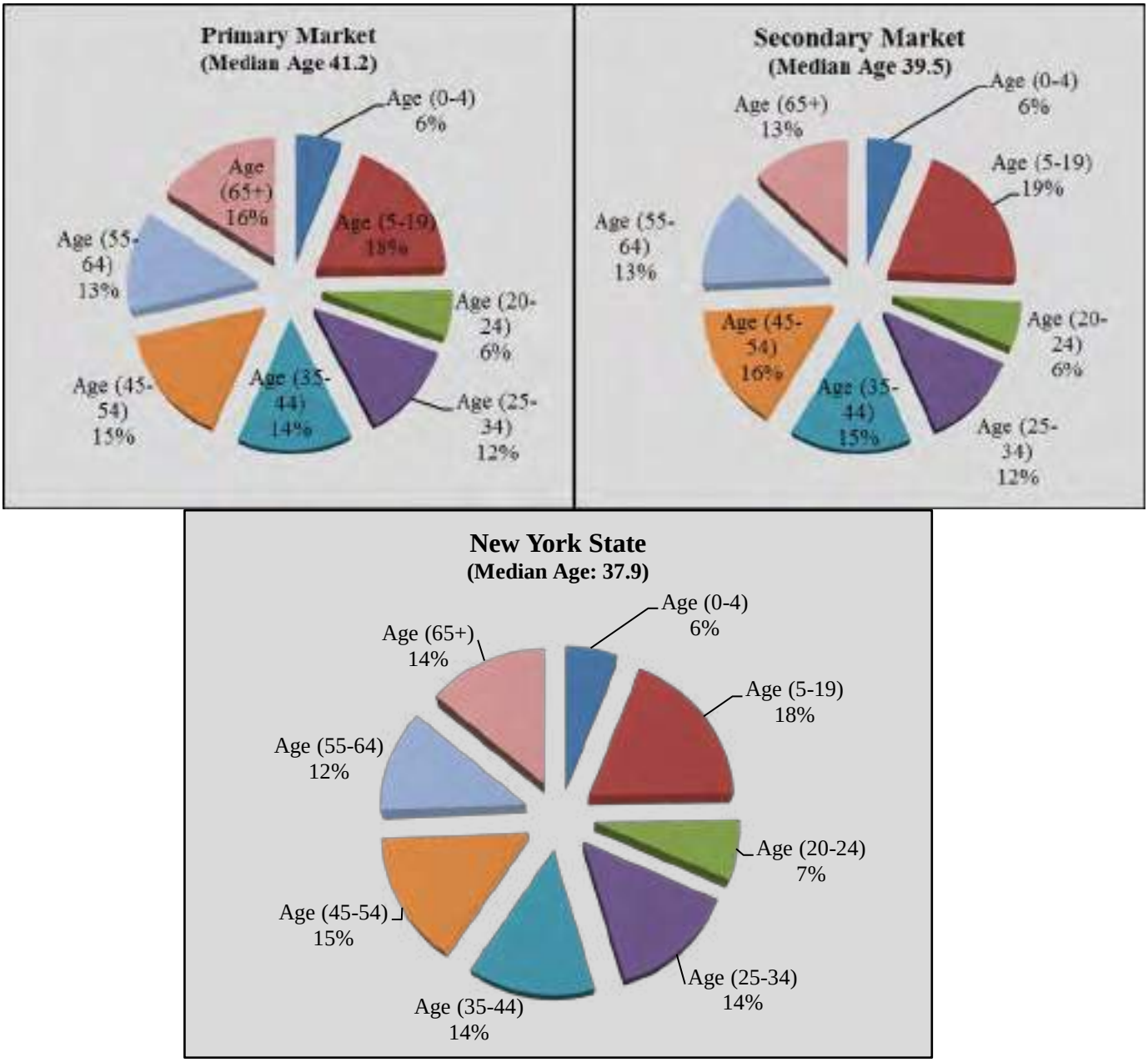


Population Age

The 2010 population age structure of the Primary and Secondary Market areas is illustrated and compared with NY State and are shown in **Chart 3-2**. The age structure of target market areas is similar to NY State except that the target market areas have a larger proportion of older residents as further indicated by median age which is higher than NY State's median age of 37.9. Also, both the Primary and Secondary Market areas have a greater proportion of empty nesters (age

group 55-64). The core working age group (35-54) for the Primary Market, Secondary Market, and NY State is 29 percent, 31 percent, and 29 percent, respectively.

CHART 3-2
2010 MEDIAN AGE PIE CHARTS



The changing age structure between 2010 and 2020 shown in **Table 3-8** illustrates a number of notable trends within the Primary Market and Secondary Market areas. The shaded cells in **Table 3-8** highlight the more significant growth areas in individual age cohorts which further indicates increase in percent population for age 55 and higher. Percent population in all other age cohorts is expected to either stay the same or slightly decline. This suggests that the housing

growth over the past decade was primarily driven by households that were both "trading up" from starter, or lower cost housing and also possibly downsizing into retirement, or active senior housing. Projections through 2020 suggest that a continuation of the latter trend is anticipated as more of the baby boomer generation reaches retirement age. However, there is also a slight indication that more demand for starter housing may occur with slow growth projected in the 25-34 age groups, especially for the Primary Market area where the percent population is expected to grow from 11.7% in 2010 to 12.2% in 2015 and 12.6% in 2020. In 2020 there are expected to be at least 700 more residents aged 25–34 than in 2010, the age when the majority of people purchase starter homes. This data provide support for the Town's goal for providing more housing in the downtown area.

TABLE 3-8
POPULATION AGE, 2010-2020

	Primary Market Area					
Age Cohorts	2010	%	2015	%	2020	%
Age (0-4)	2,834	5.6%	2,707	5.3%	2,702	5.1%
Age (5-19)	9,324	18.6%	9,219	17.7%	9,020	17.0%
Age (20-24)	2,958	5.9%	3,036	5.9%	2,607	4.9%
Age (25-34)	5,918	11.7%	6,328	12.2%	6,652	12.6%
Age (35-44)	6,978	13.9%	6,592	12.7%	6,874	13.0%
Age (45-54)	7,698	15.3%	7,503	14.5%	7,008	13.3%
Age (55-64)	6,407	12.7%	6,884	13.2%	7,362	13.9%
Age (65+)	8,290	16.4%	9,581	18.4%	10,603	20.2%
Total	50,407	100.0%	51,850	100.0%	52,828	100.0%
Median Age	41.2		42.2		42.9	

	Secondary Market Area					
Age Cohorts	2010	%	2015	%	2020	%
Age (0-4)	26,545	6.0%	25,021	5.6%	24,650	5.4%
Age (5-19)	89,622	20.2%	85,188	18.8%	81,244	17.8%
Age (20-24)	25,986	5.8%	25,988	5.8%	22,369	4.9%
Age (25-34)	52,624	11.9%	55,926	12.4%	59,235	13.0%
Age (35-44)	64,662	14.5%	59,008	13.1%	59,816	13.2%
Age (45-54)	70,828	15.9%	68,596	15.2%	62,337	13.7%
Age (55-64)	55,639	12.5%	59,804	13.3%	64,228	14.1%
Age (65+)	59,241	13.3%	71,187	15.9%	81,731	18.0%
Total	455,147	100.0%	450,718	100.0%	455,611	100.0%
Median Age	39.6		40.8		41.7	

Other studies[39] indicate an increasing demand for affordable rental housing in Long Island, especially in downtown areas such as Riverhead. According to a 2011 poll[40], 31 percent of Long Island residents would live in an apartment, condo, or townhouse in a local downtown area. However, only 21 percent of the Long Island population actually lives within half-mile of downtown centers and only a portion of these live in multifamily buildings.

Households

The population trends identified in previous sections are further reflected in the increase in households as shown in **Tables 3-9** and **3-10**. Total number of households in the Riverhead CDP increased from 3,878 in 2000 to 4,827 in 2010, or by 24.5 percent. During the same period, the number of households for Primary Market and Secondary Market areas grew by 16.8 percent and 11.9 percent respectively. The average annual change in the number of households for the Riverhead CDP, Primary and Secondary Market areas was 2.2 percent, 1.6 percent, and 1.2 percent respectively from 2000 to 2010. Growth rates are projected to slow down significantly between 2010 and 2020. The total number of households for the Riverhead CDP is projected at 4,941 for 2020, only 114 more households than in 2010.

TABLE 3-9
TOTAL HOUSEHOLDS AND CHANGE, 2000-2020

	Census Year		**Projection**	
Geographic Area	2000	2010	2015	2020
Riverhead CDP	3,878	4,827	4,898	4,941
Primary Market	15,476	18,071	18,584	18,927
Secondary Market	139,079	155,650	158,426	160,356

TABLE 3-10
TOTAL HOUSEHOLD CHANGE, 2000 - 2020

	Change in Household		
Geographic Area	2000-2010	2010-2015	2015-2020
Riverhead CDP	949	71	43
Primary Market	2,595	513	343
Secondary Market	16,571	2,776	1,930
	Percent Change		
	2000-2010	2010-2015	2015-2020
Riverhead CDP	24.5%	1.5%	0.9%
Primary Market	16.8%	2.8%	1.8%
Secondary Market	11.9%	1.8%	1.2%
	Average Annual Change		

[39] Regional Plan Association as a part of the Long Island Affordable and Fair Housing Initiative Advisory Group, *"Long Island's Rental Housing Crisis"* September 2013.
[40] Long Island Index, "Residential Satisfaction and Downtown Development Survey: The view from Long Island and the NY Metro Area" 2011.

Geographic Area	Change in Household		
	2000-2010	2010-2015	2015-2020
Riverhead CDP	2.2%	0.3%	0.2%
Primary Market	1.6%	0.6%	0.4%
Secondary Market	1.2%	0.4%	0.2%

The average annual growth for the Riverhead CDP is projected to decrease from 2.2% (between 2000 and 2010) to 0.3 percent and 0.2 percent between 2010 - 2015 and 2015 - 2020 respectively. The average annual growth in Primary and Secondary Market areas is projected to fall to between 0.2 percent and 0.6 percent from 2010 to 2020. There was high level of growth between 2000 and 2010 and the growth has slowed since 2010 and is expected to remain slow through 2020 and based upon these projections would thus require limited additional demand for housing and services.

The average household size is represented in **Table 3-11** and shows a stable household size of about 2.64 from 2010 onwards in the Riverhead CDP. From 2000 to 2010, the household size for both the Riverhead CDP and Primary Market grew from 2.57 to 2.64 and 2.61 to 2.68 respectively. This increase is not the result of growing families with more children since the number of infants, toddlers, and school age children has gradually decreased since 2010. This increase in household size may be a reflection of the economic downturn where older children, extended families, or unrelated individuals are sharing housing due to financial or other constraints.

TABLE 3-11
AVERAGE HOUSEHOLD SIZE, 2000-2020

	Census Year		**Projection**	
Geographic Area	**2000**	**2010**	**2015**	**2020**
Riverhead CDP	2.57	2.64	2.64	2.64
Primary Market	2.61	2.68	2.68	2.69
Secondary Market	2.85	2.81	2.80	2.79

Household Income[41]

A comparison of median household income levels for the Riverhead CDP, Primary and Secondary Market areas is presented in **Table 3-12**. As shown, the Riverhead CDP and Primary Market household incomes are expected to grow more rapidly than in the Secondary Market. The household income of the Riverhead CDP is significantly lower than the market areas that support the area's retail base. In fact, the Riverhead CDP median household income for 2015 represents only 75 percent of the median household income of the Primary Market area, and 69 percent of that of the Secondary Market area (though the gap is projected to decrease by 2020, when the projected income of the CDP will be almost 80 percent of the Primary Market Area income and 74 percent of the Secondary Market Area).

[41] Household income includes all income from individual members of the household over age of 15 and includes income from all sources including wages, unemployment, and child support.

TABLE 3-12
MEDIAN HOUSEHOLD INCOME PROJECTIONS

Geographic Area	Projection		
	2015	2020	% Increase
Riverhead CDP	$58,369	$70,632	21.0%
Primary Market	$77,180	$88,565	14.8%
Secondary Market	$84,092	$94,933	12.9%

Table 3-13 shows per capita income projection for the Riverhead CDP, Primary and Secondary Market areas. Similar to the household income, per capita income in the Riverhead CDP is also significantly lower than Primary Market and Secondary Market areas.

TABLE 3-13
PER CAPITA INCOME PROJECTIONS

Geographic Area	Projection		
	2015	2020	% Increase
Riverhead CDP	$28,484	$32,605	14.5%
Primary Market	$36,049	$40,983	13.7%
Secondary Market	$36,605	$41,547	13.5%
Source: ESRI Business Analyst			

Table 3-14 provides a more detailed perspective on how household income levels are expected to change from 2015 to 2020 for the Primary and Secondary Market areas and the data is illustrated in **Chart 3-3** and **Chart 3-4**. As shown, the growth is expected to occur for households with $75,000 or more in income. All other households with income less than $75,000 are expected to decline. It is noted that for 2015, 48.6 percent of households in the Primary Market area earn less than $75,000, out of which about 23 percent earn less than $35,000. This suggests a larger number of senior households which tend to be on fixed income, but also reflect other segments of the population in lower wage jobs or receiving public assistance to supplement their income. The growth in the percentage of households with incomes over $100,000in both the primary and secondary market area indicates an increase in disposable income and potential for increased expenditure on non-essentials such as entertainment, restaurants and high end retail goods and services.

TABLE 3-14
HOUSEHOLDS BY INCOME LEVEL, 2015-2020

Primary Market Area				
Household Income	**2015**	**% of Households**	**2020**	**% of Households**
<$15,000	1,323	7.1%	1,160	6.1%
$15,000 - $24,999	1,519	8.2%	1,111	5.9%
$25,000 - $34,999	1,369	7.4%	1,189	6.3%
$35,000 - $49,999	1,943	10.5%	1,834	9.7%
$50,000 - $74,999	2,860	15.4%	2,520	13.3%
$75,000 - $99,999	2,448	13.2%	2,699	14.3%
$100,000 - $149,999	3,780	20.3%	4,373	23.1%
$150,000 - $199,999	1,726	9.3%	2,114	11.2%
$200,000+	1,615	8.7%	1,929	10.2%

Secondary Market Area				
Household Income	**2015**	**% of Households**	**2020**	**% of Households**
<$15,000	9,272	5.9%	7,899	4.9%
$15,000 - $24,999	9,324	5.9%	6,562	4.1%
$25,000 - $34,999	9,373	5.9%	7,660	4.8%
$35,000 - $49,999	14,563	9.2%	13,440	8.4%
$50,000 - $74,999	25,993	16.4%	22,493	14.0%
$75,000 - $99,999	24,500	15.5%	26,319	16.4%
$100,000 - $149,999	36,204	22.9%	40,143	25.0%
$150,000 - $199,999	15,231	9.6%	19,365	12.4%
$200,000+	13,964	8.8%	16,472	10.3%

The Secondary Market area represents high earning income households with 41.3 percent households earning more than $100,000 per year in 2015. This percentage is expected to grow to about 47.7 percent by 2020. Only 26.9 percent of the households earn less than $50,000 per annum, which is expected to decrease to about 22 percent by 2020. This information can be helpful in identifying uses and activities that may attract these householders, who have disposable income, to the downtown area.

CHART 3-3
PRIMARY MARKET HOUSEHOLD INCOME PROJECTION

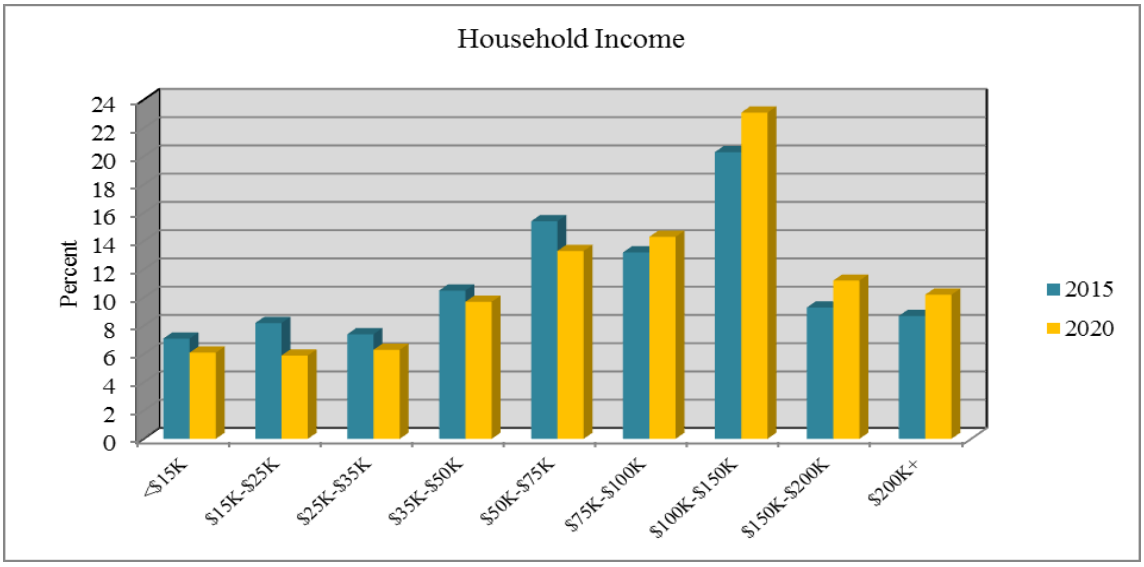
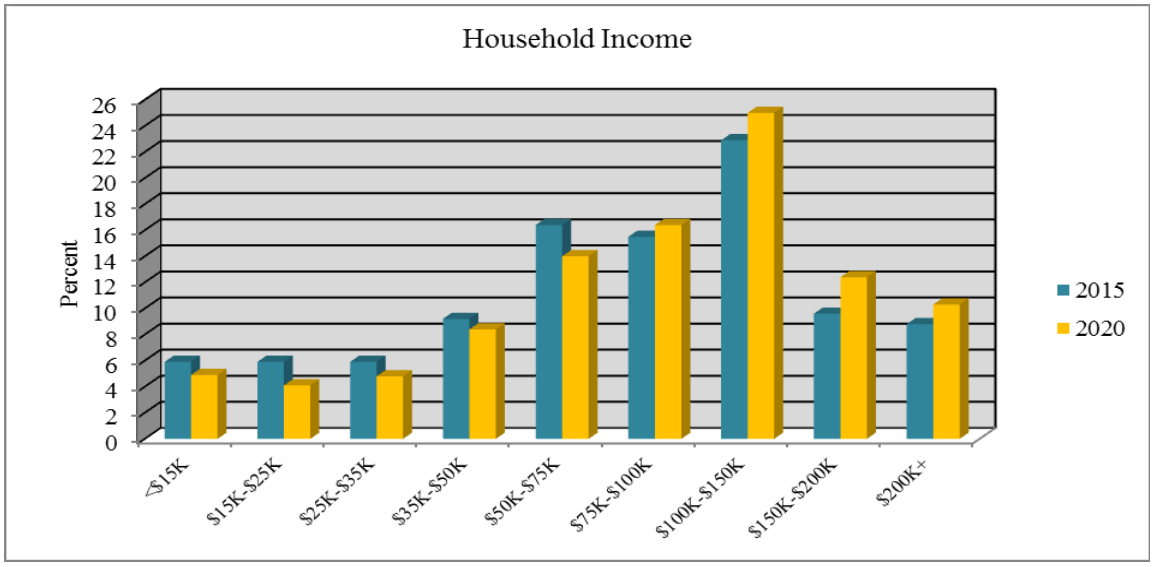


CHART 3-4
SECONDARY MARKET HOUSEHOLD INCOME PROJECTION



Disposable Income

The disposable household income[42] within the Primary and Secondary Market areas are shown in **Table 3-15**. The 2015 median household disposable income in the Primary and Secondary Market areas is $57,246 and $61,875 respectively. The major ranges of disposable income brackets are illustrated by highlighted cells in **Table 3-15** which when aggregated equate to

[42] Disposable income represents money income after taxes—an estimate of a household's purchasing power. The proportion of household income left after taxes is estimated from special studies conducted by the Census Bureau to simulate household taxes. Esri's 2015 disposable income incorporates data from the 2014 Annual Social and Economic Supplement of the Current Population Survey (ASEC).

nearly 64 percent of households in the Primary Market area having disposable incomes between $35,000 and $149,999. Similarly, about 70 percent of households in the Secondary Market area have disposable incomes between $35,000 and $149,999. This indicates strong purchasing power of households in both Primary and Secondary Market areas.

TABLE 3-15
DISPOSABLE HOUSEHOLD INCOME

Median Disposal Income Levels	Primary Market		Secondary Market	
	Number of Households 2015	% of Households	Number of Households 2015	% of Households
<$15,000	1,705	9.2%	11,568	7.3%
$15,000 - $24,999	1,752	9.4%	11,137	7.0%
$25,000 - $34,999	1,846	9.9%	13,560	8.6%
$35,000 - $49,999	2,599	14.0%	22,138	14.0%
$50,000 - $74,999	3,647	19.6%	35,850	22.6%
$75,000 - $99,999	2,842	15.3%	27,271	17.2%
$100,000 - $149,999	2,786	15.0%	24,789	15.6%
$150,000 - $199,999	816	4.4%	7,063	4.5%
$200,000+	591	3.2%	5,049	3.2%
Total	18,584	100.0%	158,424	100.0%
Median Disposable Income	$57,246		$61,875	

A more detailed disposable income profile by the age of the head of the household is shown in **Table 3-16** to help understand the population groups who have strong purchasing power in both the Primary and Secondary Market areas. Once again, the groups with highest number of households are illustrated by highlighted cells. The pattern within the Primary and Secondary Market areas appears to be similar in terms of highest number of household and their age group. The data indicates that the 45-54 age group exhibits the highest purchasing power for both Primary and Secondary Market areas with a median disposable income nearly $80,000. The two neighboring age groups, 35-44 and 55-64 also include a large number of households with a relatively high disposable income (median disposable income is more than $63,000 in the Primary and nearly $68,000 in the Secondary area).

TABLE 3-16
DISPOSABLE INCOME BY AGE OF HOUSEHOLDER

Primary Market Area							
Disposable Income Levels	Number of Households by the Age of the Head of Household						
	Under 25	25-34	35-44	45-54	55-64	65-74	75+
<$15,000	61	131	144	167	358	375	469
$15,000-$24,999	65	192	235	218	360	415	267
$25,000-$34,999	49	170	234	210	227	471	485
$35,000-$49,999	63	284	326	401	522	381	623
$50,000-$74,999	62	467	788	660	725	645	300
$75,000-$99,999	34	276	457	798	630	401	246
$100,000-$149,999	21	226	465	858	648	391	178
$150,000-$199,999	5	53	179	250	175	109	44
$200,000+	1	16	62	198	224	64	26
Total	361	1,814	2,890	3,760	3,869	3,252	2,638
Median Disposable Income	$35,918	$54,772	$63,265	$80,270	$63,834	$49,177	$36,579

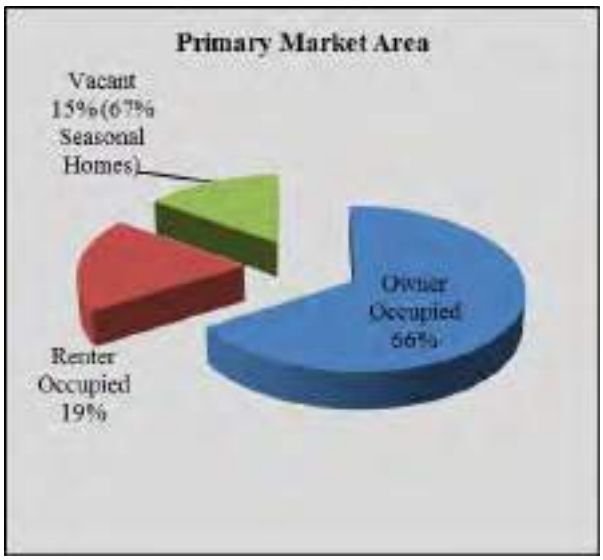
Secondary Market Area							
Disposable Income Levels	Number of Households by the Age of the Head of Household						
	Under 25	25-34	35-44	45-54	55-64	65-74	75+
<$15,000	282	957	1,032	1,365	2,457	2,166	3,308
$15,000-$24,999	285	1,176	1,463	1,676	2,343	2,407	1,787
$25,000-$34,999	271	1,340	1,816	1,752	1,794	3,256	3,331
$35,000-$49,999	458	2,716	3,085	3,909	4,767	3,324	3,877
$50,000-$74,999	518	5,247	8,057	7,133	6,727	5,918	2,250
$75,000-$99,999	289	2,970	5,790	7,636	5,875	3,040	1,672
$100,000-$149,999	145	2,244	4,303	8,296	5,800	2,889	1,112
$150,000-$199,999	25	586	1,602	2,089	1,468	991	302
$200,000+	3	202	549	1,650	1,875	595	174
Total	2,277	17,438	27,697	35,508	33,106	24,585	17,813
Median Disposable Income	$43,510	$58,937	$67,948	$79,643	$67,416	$53,193	$36,253

Housing Profile

The occupancy status of 2010 housing stock is illustrated in **Chart 3-5**. Housing tenure of the Primary and Secondary Market areas are presented in **Table 3-17**. Total housing stock in 2010 was reported to be 21,219 housing units in the Primary Market area and 184,532 in the Secondary Market area. Slight growth in the total number of housing units are expected in both Primary and Secondary Market areas from 2010 to 2020. Both the Primary and Secondary Market areas show high vacancy rates (14.8 percent and 15.7 percent respectively in 2010);

however, the high vacancy rate is primarily a reflection of the seasonal/recreational/occasional units which includes second homes.

CHART 3-5
2010 HOUSING UNITS BY OCCUPANCY STATUS



Note: The Primary and Secondary Market areas have 2,098 and 19,687 seasonal homes respectively, accounting for a high percentage of the vacant units reported by the Census.

Out of the total 21,219 housing units located within the Primary Market area in 2010, 65.6 percent were owner occupied, 19.5 percent were renter occupied, and 14.8 percent were vacant. The data indicates that the ownership rate is expected to grow at a modest rate from 2010 to 2020. The percent of renter occupancy is expected to grow at a rate of nearly 1 percent from 2010 to 2015 with a much smaller growth rate between 2015 and 2020 (expected 0.1 percent growth). In addition, it is noted that the data do not reflect the construction of new apartments and thus the actual growth is expected to be higher. The vacancy rate is expected to decline from 14.8 percent in 2010 to 13.1 percent in 2020. The expected reduction in vacancy rate for 2020 can be attributed to a higher owner occupancy rate of 66.3 percent and a higher renter occupancy rate of 20.5 percent.

While the Primary Market Area reflects an increase in owner and renter occupancy with a decrease in vacancies, the Secondary Market Area is expected to decrease in owner occupancy and vacancies, with an increase in renter occupancies. Out of a total of 184,532 housing units in 2010, 65.1 percent were owner occupied, 19.2 percent were renter occupied, and 15.7 percent were vacant. The percent of owner occupied units is expected to decrease slightly from 2010 to 2020 from 65.1 percent to 64.5 percent. The data indicates a higher percentage of renter occupied units in 2015 (20.0 percent) and 2020 (20.3 percent). The percent of vacant units is expected to slightly reduce from 15.7 percent in 2010 to 15.2 percent in 2020.

TABLE 3-17
HOUSING UNITS BY OCCUPANCY STATUS AND TENURE

Primary Market						
Occupancy Status	2010		2015		2020	
	Number	%	Number	%	Number	%
Occupied	18,071	85.2%	18,584	86.3%	18,926	86.9%
Owner	13,930	65.6%	14,200	65.9%	14,453	66.3%
Renter	4,141	19.5%	4,384	20.4%	4,473	20.5%
Vacant	3,148	14.8%	2,958	13.7%	2,858	13.1%
Total Housing Units	21,219	100.0%	21,542	100.0%	21,785	100.0%
Secondary Market						
Occupancy Status	2010		2015		2020	
	Number	%	Number	%	Number	%
Occupied	155,650	84.3%	158,425	84.7%	160,356	84.8%
Owner	120,201	65.1%	120,966	64.7%	121,920	64.5%
Renter	35,449	19.2%	37,459	20.0%	38,436	20.3%
Vacant	28,882	15.7%	28,609	15.3%	28,643	15.2%
Total Housing Units	184,532	100.0%	187,035	100.0%	188,999	100.0%

3.4 Economic and Market Trends Analysis

An Economic and Market Trends Analysis can identify new opportunities for vacant and underutilized properties. Despite the strengths – both within the Study Area and in the immediate surroundings – the downtown has failed to fully capitalize on its assets. An abundance of vacant storefronts and underutilized properties exist in the downtown and nearby, and stores are struggling to compete with the nearby "big-box" retail corridor. In addition, the downtown area lacks an identity; there is a strong opportunity to benefit from a more niche-oriented position in the local market. In short, the Town – and the downtown especially – must make efforts to position itself to a broader market by attracting the right mix of businesses that are demanded in the local market; the downtown's economic future is dependent on it.

An analysis of local retail market potential identifies and quantifies the existing uses, and compares it to the demand by residents, visitors and others in the local market. The analysis identifies the mix of uses that are economically suitable for the downtown, by understanding how the community's resources both meet, and fall short of, the needs of its residents and visitors alike. The study includes an analysis of, and makes recommendations for, the most sustainable uses for the downtown, as well as uses that may be better suited to areas outside of the downtown within the Study Area. The analysis and recommendations are intended to function as a planning assistance tool, providing Town personnel with assistance in business and industry attraction and retention efforts for downtown Riverhead, based on the types of uses recommended in this analysis. In addition, preferred used will inform any rezoning and redevelopment efforts.

Methodology

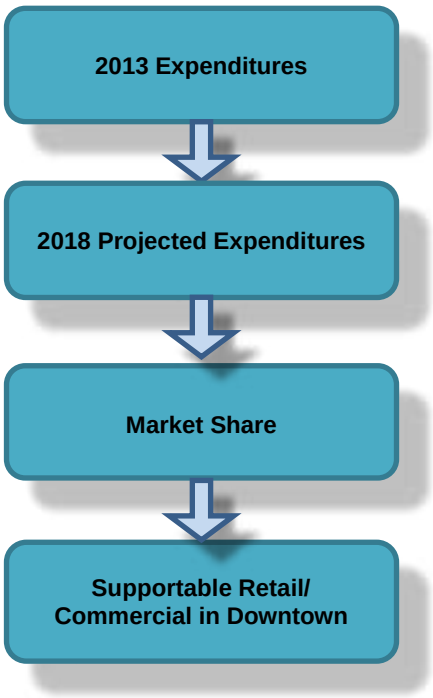
Various data and information from national, state, local and private sources were used to conduct the analysis of local retail market potential for Downtown Riverhead. Methodology specific to various sections of this analysis are outlined in greater detail where applicable. This form of analysis conforms to standards of the industry, with methods, data and information, and sources that are considered to be industry standard in the preparation of a market analysis.

- The United States Census Bureau was consulted for pertinent demographic data, including population trends, household trends and median household income from 1990, 2000 and/or 2010 for the target market area. These data will be utilized to examine the trends in demand for various types of uses for the Study Area.

- International Council of Shopping Centers (ICSC) and Urban Land Institute (ULI) both publish standards pertaining to trade areas for various types of shopping places. Moreover, these sources provide median sales revenues per square foot among various types of shopping places and specific types of retail establishments within a sample of the above-mentioned shopping-place protocols in the United States. These data will be useful when projecting the absorption and the amount of space that could be supported within downtown Riverhead and throughout the Study Area.

- Environmental Systems Research Institute, Inc. (ESRI) generated on-demand demographic reports specific to the target market areas. Various reports were created for each of the geographic areas under study, with demographic factors in these profiles including those pertaining to age, average household size, median household income, per capita income, and employment, among others. Data was collected for 2000 as well as current estimates and projections, where available. In addition, reports were created for the purpose of preparing an analysis of local retail market potential to measure supply and demand. This allows for an understanding of whether existing goods and service providers adequately meet the needs of the downtown's consumers.

- Planners Advisory Service (via the American Planning Association) compiles planning research including case studies, news articles, success stories, best practices, incentives, innovative solutions and implementation strategies used in similar riverfront and/or waterfront communities – both domestic and abroad – that have experienced a successful transformation and an economically thriving downtown. NP&V reviewed the materials for insight into successes that may be applied in Riverhead.



The current expenditures (based upon 2013 data) within the Primary and Secondary Market areas were studied to understand the consumer spending pattern. The expenditure for 2018 was then projected based on projected increase in median income and projected increase in number of households. It is to be noted that the consumer spending was only considered for retail goods and services which are typically found in a downtown. The overall methodology is described by the flow chart (shown here to the right).

Market share, for purposes of this BOA Study, is the percent of spending in a downtown compared to the total spending within the market area. Market share is calculated by dividing the total

spending in the downtown and total spending in the primary market area. It is to be noted that the limit of a downtown area and its associated Primary Market Area will vary from area to area, depending upon the unique demographics and geographic character of a region. The market share was calculated to provide an "order of magnitude" estimation of how much of the projected 2018 expenditure could be spent downtown. The sales expenditures are divided by the average sales per square feet for retail use (ICSC/ULI) to calculate the square feet of retail space that can be supported in the downtown by 2018.

Leakage in an area represents a condition where demand exceeds supply. In other words, retailers outside the market area are fulfilling the demand for retail products; therefore, demand is "leaking" out of a trade area. Such a condition highlights an opportunity for new retailers to enter a trade area or for existing retailers to extend their marketing outreach to accommodate the excess demand. A leakage analysis was also conducted to determine and identify opportunities for introduction or expansion of commercial uses within downtown Riverhead.

Tourist data were analyzed to determine the additional demand that could potentially be generated by increased number of tourists. Increase in number of tourists is anticipated as a result of overall improvements in downtown Riverhead and introduction of key tourist attractions.

For comparative purposes, the business mix and tourist attractions in other downtowns in Long Island were reviewed to provide insight into strengths and weaknesses within downtown Riverhead.

Finally, tapestry segment data published by ESRI is reviewed for the Primary Market Area. Tapestry classifies US residential neighborhoods into 67 unique segments [43] based on demographic and socioeconomic characteristics. Common spending patterns and preferences within the top three (3) tapestry segments were reviewed and analyzed in conjunction with survey results to determine potential demand for certain types of commercial uses within downtown Riverhead.

Industry Trends

An analysis of industry trends seeks to identify the clusters that may be established or emerging in the local economy, as well as those that may serve to support stronger industries in the region. For the purpose of this analysis, industry trends – with regard to both the number of employees and the number of establishments – within the boundaries of Suffolk County were examined over fourteen year period (between 1998 and 2012).

The values shown in **Table 3-18** compare the businesses in Suffolk County in 1998 as compared to 2012[44] based upon the NAICS code and highlights significant changes in overall businesses during this period. There was the highest growth in construction and professional, scientific and technical services, and high growth in health care/social assistance, accommodation and food

[43]See: http://doc.arcgis.com/en/esri-demographics/data/tapestry-segmentation.htm#ESRI_SECTION1_87F5D845F8E04723AE1F4F502FF3B636
[44] Source: http://censtats.census.gov

services, Administrative and Support and Waste Management and Remediation Services and Finance and Insurance. The biggest loss for the county was in manufacturing businesses, which declined by a total of 444 businesses.

The values shown in **Table 3-19** compare the change in the number of paid employees in Suffolk County in 1998 as compared to 2012 based upon the NAICS code of the company and highlights significant changes in overall employment during this period.

Green shading in each table indicates increases in jobs or businesses, while red shading indicates losses.

TABLE 3-18
CHANGE IN BUSINESS ESTABLISHMENTS
SUFFOLK COUNTY
1998 - 2012

NAICS code description	Change in Total Establishments Between 1998 and 2012 (values in parenthesis are losses)
Total for all sectors	6,530
Agriculture, Forestry, Fishing and Hunting	5
Mining, Quarrying, and Oil and Gas Extraction	(4)
Utilities	48
Construction	1,182
Manufacturing	(444)
Wholesale Trade	(115)
Retail Trade	86
Transportation and Warehousing	283
Information	67
Finance and Insurance	584
Real Estate and Rental and Leasing	305
Professional, Scientific, and Technical Services	1,513
Management of Companies and Enterprises	45
Administrative and Support and Waste Management and Remediation Services	730
Educational Services	211
Health Care and Social Assistance	977
Arts, Entertainment, and Recreation	164
Accommodation and Food Services	805
Other Services (except Public Administration)	503
Auxiliaries (exc corporate, subsidiary & regional mgt)	(55)
Industries not classified	(360)

TABLE 3-19
CHANGE IN PAID EMPLOYEES (FOR THOSE SECTORS WHERE DATA IS AVAILABLE)
SUFFOLK COUNTY FOR 1998 - 2012

NAICS code description	Change in Paid Employees (where information available)
Total for all sectors	62,752
Agriculture, Forestry, Fishing and Hunting	
Mining, Quarrying, and Oil and Gas Extraction	
Utilities	
Construction	8,384
Manufacturing	(14,863)
Wholesale Trade	(1,795)
Retail Trade	9,331
Transportation and Warehousing	2,325
Information	(3,045)
Finance and Insurance	(1,644)
Real Estate and Rental and Leasing	534
Professional, Scientific, and Technical Services	14,450
Management of Companies and Enterprises	2,485
Administrative and Support and Waste Management and Remediation Services	3,297
Educational Services	3,456
Health Care and Social Assistance	22,914
Arts, Entertainment, and Recreation	2,171
Accommodation and Food Services	14,412
Other Services (except Public Administration)	4,659
Auxiliaries (exc corporate, subsidiary & regional mgt)	(2,724)
Industries not classified	

A large number of industries witnessed considerable growth, both in terms of the number of employees and the number of establishments within the community. An analysis of the industry data reveal several strong clusters in the regional economy. This includes services pertaining to health care, professional, scientific and technical services, retail, tourism, and construction. There has been a significant decline in manufacturing jobs in Suffolk County during this period, and to a lesser degree, information services, real estate and leasing and management. See additional data in **Appendix H-1**.

Based upon the areas of growth, it appears that there exists opportunities for additional office space within the county – including space for both professional and medical uses.

Growth Areas for Long Island

The New York State Department of Labor has created a list of the fastest growing occupations on Long Island, projected between 2010 and 2020. The top twelve occupations with the fastest growth (percentage wise) are shown in **Table 3-20**. (The full dataset is provided in **Appendix H-2**).

TABLE 3-20
FASTEST GROWTH OCCUPATIONS
TOP TWELVE BY GREATEST PERCENT OF INCREASE

Title	Percent Change	Employment 2010	Employment 2020	Increase in jobs
Personal Care Aides	53.3%	12,210	18,720	6,510
Physical Therapist Aides	47.8%	690	1,020	330
Home Health Aides	46.9%	13,150	19,320	6,170
Veterinary Technologists and Technicians	41.5%	940	1,330	390
Athletic Trainers	38.5%	130	180	50
Audiologists	36.8%	190	260	70
Helpers--Brickmasons, Blockmasons, Stonemasons, Tile and Marble Setters	36.5%	520	710	190
Helpers--Carpenters	36.5%	850	1,160	310
Coaches and Scouts	36.2%	2,710	3,690	980
Diagnostic Medical Sonographers	34.5%	550	740	190
Medical Secretaries	33.9%	1,920	2,570	650
Physical Therapists	33.7%	2,730	3,650	920

Source: New York State Department of Labor, Division of Research and Statistics, Occupational Employment Statistics Survey

It is also important to view the actual increase in employment opportunities (rather than a percent change) for the fastest growing occupations, to view the bigger picture. For example, while athletic trainers and audiologists are the top five and six growth occupations based upon the percent increase, this is somewhat misleading in considering the actual number of jobs that are expected to become available (which are quite low comparatively). **Table 3-21** illustrates the top twelve growth occupations based upon the increase in the number of jobs. In this case, there are a number of occupations with a percent change in the lower values, but which overall will provide more opportunities, such as medical assistants, pharmacy technicians and medical secretaries (all within the larger health care industry).

TABLE 3-21
FASTEST GROWTH OCCUPATIONS
TOP TWELVE BY GREATEST NUMBER OF JOBS

Title	Percent Change	Employment 2010	Employment 2020	Increase in jobs
Personal Care Aides	53.3%	12,210	18,720	6,510
Home Health Aides	46.9%	13,150	19,320	6,170
Medical Assistants	25.6%	5,770	7,250	1,480
Coaches and Scouts	36.2%	2,710	3,690	980
Physical Therapists	33.7%	2,730	3,650	920
Market Research Analysts and Marketing Specialists	27.0%	3,180	4,040	860
Pharmacy Technicians	25.2%	2,620	3,280	660
Medical Secretaries	33.9%	1,920	2,570	650
Food Servers, Non-restaurant	26.7%	2,210	2,800	590
Personal Financial Advisors	28.3%	2,050	2,630	580
Software Developers, Systems Software	25.4%	2,130	2,670	540
Dental Hygienists	28.5%	1,790	2,300	510

While many of the fastest growing occupations are centered on the medical/health-care industry, other fast-growing occupations projected to occur throughout the Long Island region include those centered on recreation and fitness; food service; tourism; restaurants and entertainment; personal services; construction; and a variety of scientific, technical and professional occupations.[45]

Target Market Area

In planning for the most economically sustainable uses within downtown Riverhead, it is important to recognize various considerations and concepts affecting viability in this location. The first of these criteria is to identify the target market area. A target market area establishes the boundary from which the majority of consumer interest will be drawn for additional uses within this part of the community.

The International Council of Shopping Centers (ICSC) has defined five (5) basic types of shopping centers: convenience, neighborhood, super-community/community, regional and super-regional. These types of shopping centers vary in terms of size, number and type of tenants, and average sales per square foot, among other defining characteristics. Moreover, each shopping center prototype is associated with a drawing radius with respect to where their consumer base, or target market, originates. For example, a convenience-type shopping center typically attracts consumers from within a one (1)-mile and/or five (5)-minute drive-time radius, whereas larger super-regional shopping centers typically attract consumers from within a five (5) to 25-mile and/or a 30-45 minute drive-time radius. However, downtowns, mixed-use developments and other shopping centers such as lifestyle centers and town centers provide consumers with a much different experience than traditional shopping centers, and therefore don't necessarily fall within

[45] New York State Department of Labor, Fastest Growing Occupations, Long-Term Occupational Projections, Long Island Region, 2010-2020. Accessed via http://labor.ny.gov/stats/lsproj.shtm.

one of these defined classifications.[46] The boundaries of the target market area for these types of shopping areas are slightly more elusive. As such, and for the purpose of this analysis, it was necessary to create a unique target market area for downtown Riverhead, based on population density, travel time, travel pattern, geographic barriers, and the existence and location of other comparable downtown settings.

Downtown Riverhead is unique in that it attracts a mix of consumers – ranging from local residents, to Town and other local employees, and visitors from both near and far. Since these consumers tend to have different spending patterns, it was necessary to categorize them into two market segments: the primary market area, and the secondary market area. A study titled "Real Estate Market Assessment Calverton Enterprise Park (EPCAL)" conducted by RKG Associates in December of 2011 looked at Town of Riverhead data and compared it with Suffolk County and Long Island.[47] This study analyzed different development potentials and options for EPCAL property including an airport, high-tech business park, mixed use planned development, native American casino gaming, professional auto racing, polo/equestrian complex, and specialized recreational uses.

While some studies designate downtown markets within a certain "ring" radius, of say three (3) or five (5) miles, Long Island is a unique market, and its dense population and generally car oriented population, a more accurate depiction of a target market area considers average travel time, which is determined by the pattern of roadways, speed limits, and geographic barriers. As such, an average 15-minute drive time radius was calculated (through the ESRI Business Analyst program) to determine the Primary Market area. The Secondary Market area was determined by the 30-minute drive time radius and includes the entire of the North Fork and Shelter Island. While the 30-minute drive time only extended as far east as the Southold hamlet, an examination of current market conditions indicate that residents of the entire North Fork and Shelter Island travel to Riverhead for the majority of their goods and services. Therefore, the Secondary Market area boundary was extended to include the North Fork and Shelter Island.

It is important to note that residents of the target market areas do not represent the only consumers projected to support additional business and industry within downtown Riverhead. Other consumers residing outside of the target market area support retailers in downtown Riverhead, since it is a destination in itself and is within close proximity to other attractions in the area, including Tanger Outlet Center, the Long Island Aquarium, Suffolk Theatre, the riverfront, and other attractions which will continue to draw additional interest to the area.

Key Demographic Trends

Trends in the residential population and in the number of households located within the target market area allow for a clear understanding of those consumers that support the local economy – including new businesses in Downtown Riverhead area. An analysis of past data, coupled with current estimates and projections, illustrate the changing needs of the target market area, and how such needs can be accommodated within the local market through existing and future

[46] International Council of Shopping Centers, "ICSC Shopping Center Definitions: Basic Configurations and Types for the United States," 2004.
[47] RKG Associates, Inc., "Real Estate Market Assessment Calverton Enterprise Park (EPCAL) Riverhead, New York," December, 2011.

business establishments. **Table 3-22** provides demographic summary of Riverhead CDP, Primary Market, and Secondary Market.

TABLE 3-22
DEMOGRAPHIC SUMMARY, 2015-2020

Parameter	Riverhead CDP		Primary Market		Secondary Market	
	2015	2020	2015	2020	2015	2020
Population	13,496	13,607	51,848	52,829	450,718	455,613
Households	4,898	4,941	18,584	18,927	158,426	160,356
Families			12,533	12,743	113,761	114,901
Median Age			42.2	42.9	40.8	41.7
Median Household Income	$58,369	$70,632	$77,180	$88,565	$84,092	$94,933

The following provides a summary of the data utilized in the economic trends analysis:

- Population growth in Riverhead CDP has outpaced the growth of both the Primary Market and Secondary Market areas as population grew from 10,513 in 2000 to 13,299 in 2010, representing a growth of 26.5 percent during this 10 year period.
- Growth rates are projected to slow down significantly from 2010 to 2020. The total population of Riverhead CDP is projected to be 13,607 in 2020, only 308 more than its 2010 population.
- The age structure of target market areas is similar to NY State age structure except that the target market areas has a larger proportion of older residents as further indicated by median age which is higher than NY State's median age of 38.0. Also, both Primary and Secondary Market areas has greater proportion of empty nesters (age group 55-64).
- There is also a slight indication that more demand for starter housing may occur with slow growth projected in the 25-34 age groups, especially for the Primary Market area where the percent population is expected to grow from 11.7 percent in 2010 to 12.6 percent in 2020.
- Other studies[48] indicate an increasing demand for affordable rental housing in Long Island, especially in downtown areas such as Riverhead downtown provides. According to 2011 poll[49], 31 percent of Long Island residents would live in an apartment, condo, or townhouse in a local downtown area. However, only 21 percent of Long Island population actually lives within half-mile of downtown centers and only a portion of these live in multifamily buildings.
- Total number of households in the Riverhead CDP increased from 3,878 in 2000 to 4,827 in 2010, an increase of 24.5 percent. Growth rates are projected to slow down significantly between 2010 and 2020. The total number of households for Riverhead CDP is projected to be 4,941 in 2020, only 114 more than in 2010.
- From 2000 to 2010, the household size for both Riverhead CDP and Primary Market grew from 2.57 to 2.64 and 2.60 to 2.68 respectively. This increase is not the result of growing families with more children but a reflection of the economic downturn where older children, extended families, or unrelated individuals are sharing housing due to financial constraints.

[48] Regional Plan Association as a part of the Long Island Affordable and Fair Housing Initiative Advisory Group, *"Long Island's Rental Housing Crisis"* September 2013.
[49] Long Island Index, "Residential Satisfaction and Downtown Development Survey: The view from Long Island and the NY Metro Area" 2011.

- The Primary and Secondary Market areas represent high earning income households with about 40 percent households earning more than $100,000 per annum in 2015. This percentage is expected to grow to about 45 percent by 2020.

Expenditure Analysis

In order to determine whether additional commercial space may be supported in the local market, it was necessary to conduct an analysis of market demand. This section examines the demand for new business and industry in Downtown Riverhead. The demand is based on several determining demographic and socioeconomic characteristics of the residential population located within the target market areas, household expenditure analysis as well as information obtained through surveys and interviews with key stakeholders.

Current Expenditure

A summary of retail goods and services expenditures for the primary and secondary market areas for 2015 is provided below in **Table 3-23**. This data is useful in understanding how money is spent, and the percentage spent on major items.

TABLE 3-23
RETAIL GOODS & SERVICES EXPENDITURES

	PRIMARY MARKET		SECONDARY MARKET	
	Average Amount Spent per Household (HH)	**Estimated Total spent within Primary Market Area**	**Average Amount Spent per Household (HH)**	**Estimated Total spent within Secondary Market Area**
Apparel and Services	$2,976	$55,309,143	$2,115	$341,693,056
Computer	$342	$6,361,489	$355	$57,292,374
Entertainment & Recreation	$4,360	$81,020,293	$4,741	$765,917,707
Food	$8,045	$149,500,289	$8,195	$1,323,837,304
Health	$924	$17,173,289	$954	$154,146,890
Household Furnishings and Equipment	$1,393	$25,887,326	$1,480	$239,122,873
Household Operations	$2,224	$41,323,568	$2,321	$374,972,392
TOTAL	$20,263	$376,575,397	$20,161	$3,256,982,596

* Not all categories of expenditures are included in the above table. For a complete breakdown, see the data provided included in **Appendix H-3**.

In the Primary Market Area, the total retail goods and services expenditures exceed $376 million per year and with an average of $20,263 per year/household. In the Secondary Market Area, nearly $3.2 Billion is spent yearly on retail goods and services, with an average of $20,161 per year/household. Household expenditure data for retail goods and services for both Primary and Secondary Markets are provided in **Appendix H-3**.

Projected Expenditures

The projected expenditure for 2020 within the Primary Market area is calculated (see **Appendix H-3)** and summarized in **Table 3-24** below. The total projected expenditure for 2020 is calculated to be $440,100,519 which indicates additional $63,525,122 expenditure that would be available within the Primary Market Area. This additional expenditure is simply a result of increase in 343 new households (as projected) and increased average expenditure of current households from $20,263 in 2015 to $23,253 in 2020. The 2020 average expenditure is projected based on increase in median family income from $77,180 in 2015 to $88,565 in 2020.

It should be noted that only a portion of $63,525,122 additional expenditure would be spent in downtown Riverhead. Most of the daily basic needs including food and home furnishing will be satisfied by the businesses located outside of the downtown Riverhead such as the retail corridor along Route 58. However, a small percent of this available expenditure would be actually spent in downtown Riverhead such as restaurants and few daily basic needs for food and groceries. The next section calculates the percent that would be available for spending within the downtown Riverhead.

TABLE 3-24
2020 PROJECTED EXPENDITURES FOR PRIMARY MARKET

	Avg. Expenditure/ Household	Total Expenditure
2015 Expenditure		
From current 18,584 households	$20,263	$376,575,397
2020 Expenditure		
From additional 343 new households	$23,253	$7,975,616
From current 18,584 households		$432,124,904
Total		$440,100,519
Additional Expenditure (2015 - 2020)		$63,525,122

Future Downtown Expenditure

Downtown Market Share: Downtown market share can be defined as the percent of spending in a downtown compared to the total spending within the Primary Market Area. In order to determine the market share, actual business sales data for the downtown area and Primary Market area (7 minute drive time) were obtained from ESRI Business Analyst. Three (3) sample markets in Long Island including Huntington, Port Jefferson, and Patchogue (see **Appendix H-4,** Retail MarketPlace Profile reports from ESRI Business Analyst) were used to determine future intended capture for Downtown Riverhead. These three downtowns were chosen based upon input received regarding other downtowns that survey respondents visit and input from the Steering Committee. The downtowns are all located in Suffolk County and have had continued success as places to live, play, work and shop (or in the case of Patchogue has recently revitalized and become a successful downtown).

The ratio of actual sales is calculated between the downtown area and primary market areas for individual retail sectors for all three (3) sample markets. For example, a ratio of actual dollar spent on groceries is calculated within downtown area and primary market area based on actual

sales. The market share is calculated for all individual retail sectors and is provided in **Appendix H-5**[50] and summarized in **Table 3-25**.

Based upon analysis, the average market share of the three (3) example markets in Long Island is approximately 6.47 percent, or the amount of sales within the downtown area compared with total sales in the Primary Market[51]. The current market share for Riverhead is estimated at 2.62 percent which is calculated based on actual sales of retail sectors within the downtown area and Primary Market Area. If Riverhead has a comparable market share as the sample downtowns, its sales would increase by an additional 3.85 percent of the Primary Market.

TABLE 3-25
MARKET SHARE

	Supply (Downtown)	Supply (7 Min Drive Time)	Market Share
Huntington	$42,291,213	$533,855,245	7.9%
Port Jefferson	$22,666,092	$430,347,717	5.3%
Patchogue	$74,262,895	$1,184,380,478	6.2%
Average Market Share			6.47%
Riverhead Market Share			2.62%
Potential for Additional Market Share			3.85%

Projected Downtown Expenditure: Riverhead downtown expenditure is then calculated by applying the market share calculated in the previous section with the additional available expenditure within the Primary Market area. The calculation is shown below in **Table 3-26** which indicates additional $17,152,831 would be available to be spent in downtown Riverhead by 2020.

TABLE 3-26
2020 PROJECTED ADDITIONAL DOWNTOWN EXPENDITURE

	2020 Projected Expenditure	Downtown Market Share	2020 Projected Additional Downtown Expenditure
Additional new households[52]	$7,975,616	6.47%	$516,022
2020 Projected Expenditure from current 18,584 households	$432,124,904	3.85%	$16,636,809
Total	$440,100,519		$17,152,831

[50] Note that Appendix I-2 provides an economic analysis of alternative development scenario 2 described herein (and detailed methodology/factors included in the development of alternative scenarios contained in Appendix I. It is noted that the data utilized for Market Share was prepared prior to 2020 projection becoming available.
[51] A seven (7) minute drive time radius has been used as the Primary Market Area for these three (3) example markets because most have retail centers located within this distance.
[52] Per demographic projections within the Primary Market Area.

Additional Supportable Commercial in Downtown

The additional $17,152,831 available for expenditure within the downtown Riverhead would generate demand of retail and service sectors, either new or expansion of existing facilities. Average sale/SF of $284.30[53] is used to calculate the amount of additional square feet of commercial space that can be supported by an increase in expenditures and is shown below in **Table 3-27**. The total amount of retail and commercial space that can be supported within the downtown Riverhead as a result of $17,152,831 additional expenditure is estimated to be 60,334 SF.

TABLE 3-27
ADDITIONAL SUPPORTABLE RETAIL/ COMMERCIAL (2018)

2020 Projected Additional Downtown Expenditure	Avg. Sales/ SF (ULI/ICSC)	Supportable Retail/Commercial (SF)
$17,152,831	$284.30	60,334 SF

It is further noted that this 60,334 SF of additional retail/commercial space is essentially due to increase in number of new households and increase in the median family income. It is assumed that the overall improvements within downtown Riverhead will result in more reliance on retail and services provided within the downtown Riverhead to satisfy the demands on local residents similar of the other successful downtowns in Long Island such as Huntington, Port Jefferson and Patchogue. The additional expenditures could also be absorbed by businesses that locate within existing vacant space in downtown Riverhead.

The alternative development scenarios for the BOA Study Area have been prepared and are described in **Appendix I** of this report as well as the additional residential and non-residential square footage that can be reasonably accommodated in Riverhead Downtown area. The future development within the entire BOA Study Area is also described and resulting floor area for individual uses is calculated. The economic impact of alternative development scenario 2 including resulting additional employment is provided as **Appendix I-2**.

Preliminary Findings and Recommendations

- In the Primary Market Area, the total retail goods and services expenditures exceed $376 million per year with an average of $20,263 per year/household.
- The projected expenditure for 2020 is calculated to be $440,100,519 within the Primary Market Area which indicates additional $63,525,122 would be available for expenditure.
- The average market share of the three (3) example markets in Long Island including Huntington, Port Jefferson, and Patchogue is estimated to be 6.47 percent. The current market share for downtown Riverhead is estimated to be 2.62 percent. The analysis evaluates the additional commercial square footage of space that could be supported if downtown Riverhead was able to increase its market share by an addition 3.85 percent.

[53] The average sales per square feet is obtained from ICSC/ULI.

- By 2020, additional $17,152,831 would be available to be spent within the downtown and it would support approximately 60,334 SF of retail and commercial space.

Leakage Analysis

In order to quantify the opportunity for new commercial development within downtown Riverhead, a leakage analysis was conducted. For the purpose of this analysis, the demand represents the average consumer expenditures (in 2015) among households located within the target market area – split into the primary market area and the secondary market area – for various types of retail. The supply represents the actual sales revenues generated by the existing businesses located within the target market area, as of the fourth quarter of 2014 The difference between the demand and the supply indicate a leakage or a surplus in the local retail market. A leakage or surplus is differentiated and quantified through a leakage factor – ranging from negative 100 percent (-100 percent) to 100 percent (+100 percent). A factor of -100 percent indicates a complete market surplus, where demand is zero. A factor of 100 percent indicates a complete leakage, where supply is zero.

A leakage emerges when the demand exceeds the supply. This typically occurs when consumers purchase goods from outside of the target market area. This may be indicative of the nonexistence of retailers within the target market area, or of retailers with greater selection and/or better prices elsewhere, including non-store retailers and sales occurring through mail-order sources such as catalogs and online shopping sites. The existence of a leakage indicates that there remains untapped retail potential in the target market area, and it is likely that there exists demand for a given product and/or service. As such, additional opportunities within a specific industry are likely to exist within the target market area.

A surplus emerges when the supply exceeds the demand, or when retailers are able to attract persons residing outside of the target market area. Such a surplus is likely indicative of specialty retailers, or those retailers with greater selection and/or better prices than in neighboring communities. The existence of a surplus indicates that the local demand has been met. As such, additional retailers within such an industry are likely not demanded and may saturate the target market area. However, it is important to note that the existence of a surplus may also indicate the presence of a niche market. A niche market is one that has been identified as having a special attribute, unique from others, that stands out from the competition, and thus becomes a place that is able to be marketed to residents, new business prospectors and visitors alike. It is important to differentiate between the two types of surpluses, and apply the appropriate rationale when forming recommendations for uses that would best serve the target market area.

In order to determine the specific industries with local retail potential (and therefore the industries that should be targeted for development within Downtown Riverhead), a leakage analysis was conducted specific to the target market area.[54] Data specific to both the current

[54] A leakage analysis is considered to be the industry standard when examining the relationship between market demand and existing supply during the preparation of a commercial market analysis. However, there are other factors specific to the project site that will influence the decision to locate within a given community, and ultimately determine whether retail establishments within specific industry sub-sectors will succeed within the local market. This is especially true in the Long Island market, which is vastly different than other suburban communities throughout New York State and the nation.

consumer expenditures and actual business sales data within the primary and secondary market areas were obtained from ESRI Business Analyst, to calculate the difference between the demand and the supply within both the primary market area and the secondary market area (see **Appendix H-6,** Retail MarketPlace Profile reports from ESRI Business Analyst). Data for both demand and supply are based upon household expenditures and actual sales receipts, generated through available data from the Census of Retail Trade from the United States Census Bureau.

The leakage analysis accounts for both physical retailers/food and drink establishments, as well as non-store retailers (NAICS 454: Non-Store Retailers). According to the North American Industry Classification System (via the U.S. Census Bureau), non-store retailers include mail-order sources such as catalogs and online shopping sites, as well as sales stemming from door-to-door solicitation, portable stalls and vending machine operators, in addition to establishments engaged in the direct sale of products, and newspaper delivery service providers.

An examination of consumer spending patterns was conducted, and compared to retail sales data within the target market area.[55] The supply (retail sales) of all retail trade establishments and food services and drinking places within the primary market area exceeds the demand for such retail by 43.9 percent, or by approximately $571,415,445. This retail surplus represents the total sales that retail goods and services are attracting from outside of primary market area. Contrary to primary market area, the demand for the retail trade and food and drinks exceeds the supply for such retail by 12.5 percent or by approximately $818,097 in the secondary market area. This retail gap represents the opportunity for additional retail that can be supported from current demand.

The retail surplus within the primary market area indicates that the existing businesses are not only able to capture significant consumer demand from those residing within the target market area, but also they are able to capture an abundance of demand from consumers residing outside of the target market area – including those employed within the target market area, in addition to visitors and others passing through the community. Among other rationale, this can be attributed to the existence of relatively wealthy households in the target market area, as well as specialty retailers and the historic Downtown Riverhead setting that is successful in drawing consumer demand from outside of the immediate community.

While much of the demand for goods and services is satisfied by the retailers along Route 58, there are several business segments where demand is quite strong, as reflected in significant gaps between consumer spending and sales – extending beyond the primary market area, and into the secondary market area as well. These gaps indicate success potential, with demand that is likely large enough to support additional establishment(s) within the target market area. Industries in both the primary and secondary market that exhibit a retail gap include:

- Auto parts, accessories and tire stores;
- Furniture stores;

[55] This includes stand-alone retail trade and food and drink establishments, as well as those located within all types of shopping centers and downtown settings.

- Specialty food stores (including meat markets, fish and seafood markets, fruit and vegetable markets, bakeries and/or candy stores)
- Book, periodic and music stores;
- Other general merchandise stores (including warehouse clubs and supercenters);
- Florists;
- Full-service restaurants (or sit-down restaurants where patrons generally order and are served by wait staff); and,
- Special food services (including food service contractors, caterers and mobile food services).

Community input supplemented the data and indicated the need for additional places to eat and socialize (coffee shops, other venues to hear live music), the desire to attract a grocery store to the downtown, and unique shops.

Whereas Route 58 can continue to be a retail corridor and meet the needs of the primary and secondary market areas, the downtown and gateway has an opportunity to position itself as a destination for visitors to enjoy entertainment and attractions, the riverfront environment, social venues and unique shops. Annual visitor data to nearby attractions was used to identify potential additional market for new downtown expenditures, assuming a small percentage of visitors could be drawn downtown. **Table 3-28** provides a conservative example of how additional expenditures could be accommodated by additional venues and shops in downtown Riverhead if only 1 percent of visitors to Tanger, the Aquarium, the Courts and other cultural venues were enticed through marketing campaign or other strategies to visit downtown (or in the case of downtown places - to stay to shop and or eat). A nominal spending value was applied to be conservative ($25 per person for visitors to the aquarium and Tanger, $15 for other venues and $10 for Court visitors). (It is noted that while a 1 percent capture rate was assumed, the value was reduced to account for multiple trips by the same person). Based upon this analysis, nearly $1.65 million could be diverted to downtown venues.

TABLE 3-28
ANNUAL VISITORS AND POSSIBLE NEW DOWNTOWN EXPENDITURES

	Annual Visitors	Visitor to Downtown (1% Capture)	10% Reduction to Account for Multiple Trips	Avg. Expenditure/ Visitor ($)	Total Annual Expenditure in Downtown
Tanger	6.67 million	66,700	60,030	$25	$1,500,750
Aquarium	350,000	3,500	3,150	$25	$78,750
Other Cultural Visitors	465,000	4,650	4,185	$15	$62,775
Court Visitors	80,000	800	720	$10	$7,200
TOTAL					$1,649,475

The mix of uses and percentages can show the difference between a successful destination downtown and an unsuccessful downtown. In the case of Riverhead in comparison with several locally successful downtowns, the mix of uses is fairly consistent with others - with a few noticeable differences. **Table 3-29** illustrates the business mix of six downtown areas (including Riverhead) based upon ESRI's Business Summary Reports which utilizes data provided by Dun & Bradstreet, Inc.[56] It is noted that this data does not provide a complete inventory of businesses in an area; however, is useful as a general comparison and can provide interesting insight into what businesses would be needed to attract additional visitors to the downtown. Riverhead, being situated near the County Courts and as the County Seat, has higher percentages of legal services and financial services. Whereas the other downtown areas have at least 2.5 percent of the businesses in apparel and accessories, Riverhead has no businesses in this category. In addition, under the miscellaneous retail category, which would include unique shops and gift stores, this accounts for under 4 percent in Riverhead, whereas in the other downtowns, the percentage is between 5 percent and 10 percent of the business mix. In addition, of all of the downtowns analyzed, Riverhead has the lowest percentage of eating and drinking places. Thus, if Riverhead were to emulate the successes of other downtowns by having a comparable mix of business as other destination type downtowns, additional shops and restaurants are needed. However, as noted previously, this is only one tool for identifying the 'ideal' mix of uses.

[56] Source: Copyright 2013 Dun & Bradstreet, Inc. All rights reserved.

TABLE 3-29
BUSINESS SUMMARY COMPARISON OF DOWNTOWNS

	Riverhead	Port Jefferson	Huntington	Patchogue	Greenport	Babylon
	Businesses	Businesses	Businesses	Businesses	Businesses	Businesses
by SIC Codes	Percent	Percent	Percent	Percent	Percent	Percent
Agriculture & Mining	1.3%	1.9%	1.9%	0.6%	2.4%	1.0%
Construction	3.9%	4.9%	3.6%	5.6%	6.0%	4.7%
Manufacturing	2.6%	2.5%	2.3%	2.3%	1.2%	2.6%
Transportation	1.3%	1.2%	1.3%	2.3%	3.6%	2.1%
Communication	1.3%	0.6%	0.6%	1.8%	0.0%	0.5%
Utility	0.0%	0.6%	0.0%	0.0%	0.0%	0.0%
Wholesale Trade	3.9%	3.7%	3.9%	2.9%	6.0%	5.2%
						0.0%
Retail Trade Summary	18.2%	25.3%	23.0%	23.4%	29.8%	20.4%
Home Improvement	1.3%	0.6%	0.6%	0.6%	1.2%	0.5%
General Merchandise Stores	0.0%	0.6%	0.3%	0.6%	0.0%	0.0%
Food Stores	3.9%	1.9%	2.9%	2.9%	3.6%	3.7%
Auto Dealers, Gas Stations, Auto Aftermarket	1.3%	1.2%	0.6%	1.8%	0.0%	1.0%
Apparel & Accessory Stores	0.0%	3.1%	2.6%	2.9%	4.8%	2.6%
Furniture & Home Furnishings	1.3%	1.9%	1.0%	1.8%	1.2%	0.5%
Eating & Drinking Places	6.5%	6.0%	7.6%	7.6%	10.7%	6.8%
Miscellaneous Retail	3.9%	9.3%	6.6%	5.3%	5.3%	5.2%
						0.0%
Finance, Insurance, Real Estate Summary	11.7%	9.3%	9.4%	5.8%	4.8%	8.4%
Banks, Savings & Lending Institutions	2.6%	1.2%	1.0%	1.8%	1.2%	1.6%
Securities Brokers	1.3%	1.2%	1.0%	0.6%	0.0%	0.5%
Insurance Carriers & Agents	3.9%	1.8%	2.6%	2.9%	1.2%	1.6%
Real Estate, Holding, Other Investment Offices	3.9%	4.9%	4.2%	3.6%	2.4%	5.2%
						0.0%
Services Summary	53.2%	49.4%	53.7%	50.3%	45.2%	55.0%
Hotels & Lodging	0.0%	0.6%	0.0%	0.0%	2.4%	0.0%
Automotive Services	1.3%	0.6%	1.0%	3.5%	1.2%	0.0%
Motion Pictures & Amusements	2.6%	3.7%	3.6%	2.9%	3.6%	0.7%
Health Services	7.8%	11.1%	15.2%	5.8%	8.3%	9.9%
Legal Services	10.4%	3.7%	6.1%	5.3%	1.2%	5.8%
Education Institutions & Libraries	2.6%	1.2%	1.3%	1.8%	1.2%	1.6%
Other Services	29.9%	28.4%	26.5%	27.5%	28.6%	34.0%
						0.0%
Government	2.6%	0.6%	0.6%	1.8%	1.2%	0.5%
						0.0%
Totals	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%

Another analysis completed for the Economic and Market Trends analysis included a review of common attributes of successful downtowns on Long Island and in other waterfront areas and preparation of a comparative matrix. The matrix illustrated that Riverhead has most of the features that other successful downtown destinations have, with the exception of a multitude of unique shops, a community center, a lively nightlife scene, and a movie theater. These features, interestingly, were all features that were identified as needs for the area through the community survey and other outreach conducted during the Nomination Study.

Tapestry Segments

To identify the lifestyle characteristics and housing preferences of various market areas, an evaluation of top household tapestry segments was performed. ESRI Business Information Solutions uses demographic information such as labor force characteristics, median income, age, and spending habits to categorize neighborhoods according to a trademarked Community Tapestry classification system and has named each segment to reflect the group characteristics. **Table 3-30** identifies the top tapestry segments in the Primary Market Area. To classify the lifestyle characteristics and housing preferences of various market areas in the Primary Market area, an evaluation of top household tapestry segments was performed. ESRI Business

Information Solutions uses demographic information such as labor force characteristics, median income, age, and spending habits to categorize neighborhoods according to a trademarked Community Tapestry classification system and has named each segment to reflect the group characteristics. The full Tapestry Segmentation Area Profile for the Primary Market area is provided in **Appendix H-7**, and a general description is provided below.

The 65 tapestry segments defined by ESRI Business Information Solutions have been classified into 12 Life Mode Groups. These Life Mode Groups represent markets that share a common experience or a significant demographic trait and are frequently based on common lifestyle and life stage. Within the Primary Market Area, the three dominant life mode groups are "Upscale Avenues", "Affluent Estates", and "Senior Styles" which are described below:

- Within the Primary Market Area, there are 5,103 households (27.5% of the total) are classified within the "Upscale Avenues" life mode segment. This life mode group is characterized by well-educated residents with above average earnings who have typically earned their success from years of hard work. The median household income for this group is $65,912 and residents frequently invest money in their homes. Common leisure activities include golf, weight lifting, bicycling, and domestic travel.

- There are 3,495 households (18.8%) within the "Affluent Estates" life mode group within the Riverhead Primary Market Area. The "Affluent Estates" life group includes wealthy and well-educated residents that seek a variety of activities. This group is characterized as being socially responsible and aim for a balanced lifestyle. The median household income for the "Affluent Estates" is $157,000.

- The "Senior Styles" life group consists of 3,324 households which represents 17.9% of the households in the Primary Market Area. This life group consists of many seasonal yet owner occupied housing units, including a large amount of mobile and single family homes. The median household income is $35,000 however a large portion of this group is at or near retirement age.

Table 3-30 identifies the top three tapestry segments represented in the Primary Market Area[57]. A general description of the top tapestry segments represented within the Primary Market area is provided below with profiles provided in **Appendix H-7**.

TABLE 3-30
TOP TAPESTRY SEGMENTS IN PRIMARY MARKET AREA - 2015

Tapestry Segment	Percent of Households
Pleasantville	22.6%
Senior Escapes	13.6%
City Lights	9.8%
Source: ESRI Business Analyst	

[57] Profiles of these population groups are available at: http://downloads.esri.com/ESRI_CONTENT_DOC/DBL/US/TAPESTRY/TAPESTRY_FLIERS_ALL_0914.PDF.

Pleasantville

The Pleasantville Tapestry Segment is within the Upscale Avenues Life Mode described above. Pleasantville is the dominant segment represented within Riverhead's Primary Market Area with approximately 4,193 households (22.6% of the total households). The following provides general characteristics of the Pleasantville segment:

- Demographic: Prosperous domesticity distinguishes the settled lives of Pleasantville residents. Families, especially middle-aged married couples, characterize Pleasantville neighborhoods. The average household size is 2.86; many families have adult children living at home or have transitioned into empty nesters. The median age of 41.9 years is slightly older than the U.S. median of 37.6 years.
- Socioeconomic: Among Tapestry's upscale segments, these residents have a median household income of $85,000 and a median net worth of $285,000. Employed residents work in a variety of occupations including finance, information/technology, and management. Income is primarily earned from salaries but there is a significant amount of income from investments and retirement income which is expected to increase in the coming years. This group is well educated with about 64% of residents having a college education and 34% holding a Bachelor's degree or higher.
- Residential: Residents of Pleasantville neighborhoods live in single-family homes; nearly half of these homes were built between 1950 and 1970. Despite the fluctuation in housing values over time, homeownership remains high at 83.6 percent and a low percentage of vacancies (4.7%). The median home value is $312,000. To maintain their comfortable lifestyle, 12 percent commute an hour or more to work. Transportation is important; two-thirds maintain two or more vehicles.

Senior Escapes

The Senior Escapes tapestry segment is within the Senior Styles life mode group described above. Within the Primary Market Area, there are 2,535 Senior Escapes housing units which represents 13.6% of the total housing units in the market area. The following provides general characteristics of the Senior Escapes segment:

- Demographic: Many Senior Escapes neighborhoods began as seasonal gateways and now serve as primary residences. These neighborhoods are heavily concentrated in warmer states, however, there are clusters located in eastern Long Island and other areas of the country. The average household size is 2.19 and the median age is 52.6, which is significantly older than the U.S. median. About one third of households are single-person households and an additional one third consists of married couples without children.
- Socioeconomic: The median household income is $35,000, derived from retirement and Social Security income since labor force participation is low. The median net worth is $84,000 which is slightly higher than the U.S. median of $71,000. This group is characterized by living within their means, avoiding carrying balanced and credit cards, and the majority of homes have already been paid off.
- Residential: A mix of mobile homes and single-family dwellings, these neighborhoods consist of primary and secondary homes located in rural or semirural areas. Approximately 75% of homes are owner-occupied and over half do not have a mortgage. The median home value is $110,000 which is less than the U.S. median of $177,000.

City Lights

The City Lights tapestry group is within the Middle Ground life mode and includes 1,812 households, which is 9.8% of the total households in the Primary Market Area. The Middle Ground life mode includes millennials and a combination of single/married, renters/homeowners, and middle class/working class. The majority of Middle Ground residents have attended college and spend a significant amount of time online. The following provides general characteristics of the City Lights segment:

- Demographic: The City Lights tapestry segment is a densely populated urban market characterized by residents with a passion for social welfare and equal opportunity. The common household types range from single person to married couples with children. These neighborhoods tend to be racially and ethnically diverse. The median age is 38.8 and the average household size is 2.56.
- Socioeconomic: Many residents have completed some college or have earned a college degree, and earn a good income in professional and service occupations. The median household income is $60,000 and the median net worth is $64,000. Although their incomes are above average, net worth is lagging behind the national median of $71,000. There is a high amount of labor force participation and residents often save for the future in order to buy homes. Residents work hard in professional and service operations, but also seek to enjoy life.
- Residential: These diverse neighborhoods are primarily in the Northeast. There are a variety of housing types within this segment including single-family homes, townhouses, and apartment buildings. Housing is older than the U.S. average as nearly two-thirds of structures were built before 1970. Approximately half of the homes are owned and half are rented.

Common Spending Pattern and Preferences

The common spending pattern and preferences of the top three tapestry segments in the Primary Market Are is tabulated and provided in **Table 3-31**.

TABLE 3-31
COMMON SPENDING PATTERNS AND PREFERENCES
OF THE TOP THREE (3) TAPESTRY SEGMENTS IN THE PRIMARY MARKET AREA

Spending Category	Pleasantville	Senior Escapes	City Lights
Dine Out	Occasionally to family friendly restaurant	Denny's, Golden Corral, Cracker Barrel	Health conscious; purchase low fat and low calorie food; buy groceries at Kroger and Stop & Shop
Shopping	Warehouse and Department stores	Stock up on good deals	Price savvy but will pay for quality brands that they trust; Target, Walmart
Home Improvement	Home Improvement projects are priority		Spend more on home furnishing than home improvement
Entertainment	Family oriented; theme parks, baseball games	TV, cruises, Bingo, boating/fishing, gardening	Travel, cruises, movies, HBO, visit Atlantic City

Review of the table above indicates that there is common interest of price-savvy shopping by actively seeking out deals on products and utilizing department stores. The Pleasantville and Senior Escapes residents typically dine at family friendly and affordable restaurants, while the City Lights residents are focused on healthy food options. Home Improvement projects are a priority for Pleasantville residents which indicates potential need for home improvements contractors, while City Lights focus more on furnishing than home improvement. The Pleasantville entertainment needs are mostly family oriented and therefore suggest potential need for such type of entertainment activities and facilities where children of all ages can also participate.

3.5 Development and Analysis of Alternative Development Scenarios

Based upon input from the Town and community and in consideration of the inventory and analysis, the detailed demographic profiles and the economic and market trends analysis, NP&V developed three alternative development scenarios for the BOA Study Area. The alternatives were developed at two "levels": the DC-1 level, and the overall BOA Study Area level. For purposes of this discussion, they are referred to as DC-1 Scenarios and BOA Scenarios.

First, the three development scenarios were assessed on a parcel-by-parcel basis for the properties within the DC-1 zoning district, which encompasses downtown Riverhead. Downtown Riverhead provides the greatest density of built environment within the entire BOA Study Area, especially within the DC-1 (Main Street) Zoning District. Therefore, the alternative build-out scenarios for DC-1 District were analyzed in detail prior to developing the alternative development scenarios for the entire BOA Study Area. The DC-1 Scenario 1 is based upon the existing development in the area and assumes that 80 percent of the vacant storefronts in downtown Riverhead are filled, and accounts for those developments that are currently planned for implementation. Input with respect to the type of uses desired by the community, such as a grocery store, and need to redevelop the train station block, were considered in the selection of critical sites and mix of uses.

Two future alternative development scenarios were also analyzed. Scenarios 2 and 3 represent lesser build alternatives for the DC-1 zoning district, as the buildouts represent more realistic scenarios taking into consideration market trends; the buildout also reflects what could reasonable occur within a ten-year timeframe. The results of these analyses, in terms of potential development, is described in **Appendix I-1**. The three scenarios are:

- DC-1 Scenario 1: Baseline conditions, based on current zoning regulations. Under full buildout, the DC-1 district could theoretically accommodate an additional 1,841,703 square feet gross floor area of additional space. The land use mix is described in Table 3 of Appendix I-1.
- DC-1 Scenario 2: Assumes a floor area ratio of 1.75 for the applicable developable properties. Under this Scenario, the DC-1 district could theoretically accommodate an additional 448,314 square feet gross floor area of additional space. The land use mix is described in Table 3 of Appendix I-1.
- DC-1 Scenario 3: Assumes a floor area ratio of 1.62 for the applicable developable properties. Under this Scenario, the DC-1 district could theoretically accommodate an additional 390,553

square feet gross floor area of additional space. The land use mix is described in Table 3 of Appendix I-1.

Subsequently, the three Scenarios for the DC-1 district were incorporated into three alternative development scenarios for the overall BOA Study Area. Sites within the BOA Study Area for which development was evaluated are illustrated on **Plate 2.** The three BOA Study Area scenarios are as follows:

- BOA Scenario 1: Baseline conditions, based on full buildout under current zoning regulations. This development alternative is the same as the base conditions analysis used for the traffic impact analysis and "Transit Oriented Development (TOD) Growth Plan," dated January 2014, a separate report prepared in connection with the BOA Nomination Study.
- BOA Scenario 2: This development alternative assumes the most ideal development scenario on all of the proposed sites including the conceptual plans included in **Section 4.0** of this BOA Study and this level of development provided the basis of analysis used for the traffic impact analysis and "Transit Oriented Development (TOD) Growth Plan," dated September 2015**.** It also incorporates the DC-1 District Scenario 2 buildout. Below are some of the key highlights of Development Alternative 2:

  - Site W3: Redevelopment of 87 Lumber in to an approximately 10,000 SF visitor center with food court and rail spur for scoot train;
  - Site C1: Redevelopment of properties located at the corner of Mill Road and Route-25 to Peconic Landing providing approximately 9,600 SF of retail, gift shops, restaurants, approximately 8,000 SF of bed and breakfast, and conversion of 3 existing residential homes to rental cottage;
  - Site D1: Redevelopment of the train station block to a coordinated mixed-use development providing approximately 30,000 SF of retail and approximately 95 residential apartment units along with a 4 story parking garage providing approximately 882 parking spaces;
  - Site D4: Redevelopment of a portion of the block between Griffing Ave and Osborn Ave to an approximately 14,000 SF Grocery Store and approximately 7,000 SF retail strip along with 2 story parking garage providing approximately 120 parking spaces;
  - Site D6: Redevelopment of DC-1 District to Scenario 2 as described in previous section providing an additional 69,092 SF of retail and restaurant, approximately 54,020 SF of office/other similar use, and approximately 325 additional apartment units; and
  - Site E3: Redevelopment of existing Auto Salvage (Gershow) into a multi-family development providing approximately 28 residential units. The existing site is approximately 5.9 acres and is zoned CRC (Commercial Residential Campus). FAR of 0.2 is permitted within this zone for a development without a public sewer. FAR of 0.2 would yield 51,400 SF of building floor area. Assuming 1,800 SF average size of a townhome, this site would yield approximately 28 townhomes.

All development envisioned under the BOA Scenario 2 is set forth in Table 5 in **Appendix I-1**. The following summarizes key parameters of BOA Scenario 3:

- BOA Scenario 3: The primary difference between this alternative and BOA Development Scenario 2 is the level of development within the DC-1 district (it is based on DC-1 Scenario 3) and as follows:

- Site W3: Redevelopment of 87 Lumber to a multiplex/ IMAX theater with food court;
- Site D1: Redevelopment of train station block to a multiplex with parking structure; and
- Site D6: Redevelopment of DC-1 District to Scenario-3 as described in previous section providing an additional 69,092 SF of retail and restaurant, approximately 54,020 SF of office/other similar use, and approximately 267 additional apartment units.

All development envisioned under the BOA Scenario 3 is set forth in Table 6 in **Appendix I-1**. Ultimately, one objective to establishing alternative development scenarios was to identify the most ideal development scenarios supported by the community that would also likely be feasible. The evaluation assisted in assessing where impacts and demands on public infrastructure could occur, and be realistically accommodated or mitigated.

An economic analysis using IMPLAN software was conducted of Alternative Development Scenario 2 and the results are included in **Appendix I-2**.[58] IMPLAN estimates local economic multipliers, including those pertaining to production, value-added, employment, wage and supplier data. For the purpose of this analysis, multipliers specific to socio-economic data in Suffolk County were analyzed to determine the direct, indirect and induced economic impacts during both the short-term construction period and during annual operations of the Scenario 2 buildout.

The alternative development scenario evaluation also included an evaluation of a "Sustainable Development Density Bonus". The Sustainable Development Density Bonus would be used to encourage sustainable design. **Appendix I-1** describes a theoretical program which could be implemented. Bonus density criteria Type I and Type II could be provided for projects which do not seek LEED certification but that provide sustainable approaches, e.g., to address water efficiency and the reduction of potable water use for sewage conveyance. Bonus density criteria Type III could be granted for LEED Certification[59] which includes bonus density criteria Type I and Type II. Bonus density criteria Type IV, V, VI would be granted for higher LEED standards, LEED Silver, LEED Gold, and LEED Platinum respectively. These criterion are set up such that any project can have either Type I, or Type II or Type III or Type IV or Type V or Type VI. The bonus density is incremental based upon the difficulty level (and commensurate additional investment required on the part of the applicant) from one level to the next. A resulting floor area ratio calculation is provided as **Table 8** in **Appendix I-1** for the DC-1 (Main Street) district only.

Feasibility of a new TDR program was also evaluated that could apply, for example, to properties within the Recreational Area of the WSRR, primarily along the south side of West Main Street (NYS Route 25). The land on the south side of West Main Street would become the sending area and would be preserved and put into passive public use for enjoyment of the Peconic River. The development rights could be transferred to the DC-1 District and possibly

[58] Minnesota IMPLAN Group developed an economic impact modeling system known as IMPLAN, short for "impact analysis for planning". The program was developed in the 1970s through the United States Department of Agriculture's Forest Service, and was privatized in 1993.
[59] There are 40-49 points that a project must achieve for LEED Certification. Water conservation and reduction of portable water use for building sewage conveyance are part of LEED Certification.

other areas of the downtown, which would become the receiving area. The Town Comprehensive Plan envisioned use of the Town's TDR program to allow additional density (FAR of 5.0) in the DC-1 District. However, the recommendation has not been implemented to date.

4.0 SUMMARY OF ANALYSIS, FINDINGS & RECOMMENDATIONS

This section documents the key findings and recommendations of the evaluations set forth in **Section 3.0** of this Step II BOA Study. It includes an identification of the key strategic sites and areas that present the best opportunities for redevelopment, which in turn will serve as catalysts for revitalization of the BOA Study Area as a whole.

The BOA Study Area is approximately 495 acres in size and is generally situated along NYS Route 25 between the Long Island Rail Road (LIRR) to the north and the Peconic River to the south (with some exceptions at the outer reaches where parcels to the north of the LIRR are included). The Study Area stretches approximately 1.03 miles from west to east generally from the eastern end of the Long Island Expressway (LIE) east to Hubbard Avenue and also encompasses an area north of Main Street in downtown Riverhead. For the purpose of this analysis, the overall BOA Study Area has been divided into four Subareas based on land use patterns and the location of potential strategic BOA sites. The Study Area and Subareas (West, Central, Downtown and East) are depicted on **Figure 1-4**.

The BOA Study Area presents a number of challenges and opportunities, some of which are site specific and some which are general in nature and apply to the entire Study Area. The previous sections of this Nomination Study mainly provide an inventory and analysis of broad topics including land use and zoning, natural resources, and transportation. In addition, the Study has provided data and analyses which can inform future land use and other decisions towards realization of revitalization of the Study Area (such as a full demographic analysis, the Economic and Market Trends Analysis, and the Transit Oriented Development Growth Plan).

This section also discusses each of the issues and opportunities that are present in the BOA Study Area. The discussion includes an evaluation of site specific issues as well as obstacles for future growth and development. **Plate 1** provides an overall Issues and Opportunities Plan. This section provides a summary of the analyses and recommendations by resource area and where applicable, specific recommendations by subarea.

4.1 Land Use, Zoning, and WSRR

The purpose of this section is to provide a summary of analyses included in previous sections and to apply the findings as recommendations for achieving the goals of the Town of Riverhead including the future development and redevelopment of an individual site or group of parcels.

Sketches of certain blocks of the BOA Study Area are provided, illustrating concepts for future development and redevelopment. The sketches evolved by first identifying a site, which could consist of a parcel or groups of parcels, in need of revitalization, which pose negative impacts on the environment and on the community, or which provide an opportunity to meet a community need. Current site conditions and challenges were documented. Community preferences for these sites were determined through the feedback received via a public workshop. It is important to note that the concept sketches illustrate potential layouts for planning purposes. Ultimately, the site-specific layouts would be determined at such time a land use application is advanced.

At present, the DEC WSRR regulations and Town of Riverhead zoning law govern the permissible land uses within the Study Area (and to some extent, historical land use plays a part). This section describes findings and recommendations related to land use, zoning and the WSRR for each of the four subareas. The sites are shown on **Plate 2**. **Table 4-1A** provides a summary of all sites included in the alternative development scenarios, including those sites that have been identified as strategic because of their potential to be transformative are described in detail. The sites are as follows:

TABLE 4-1A
DEVELOPMENT SITES

Subarea	Site ID	Strategic Site ID	Acres	Description
West	W1	1	13.81	Former Duck Farm – Consider redevelopment for river-oriented lodging or six-single family dwellings.
	W2		1.55	Dynamic Auto - This site was selected as strategic due to its prior and current automotive land use and its prominence as a gateway. If the DEC approves the change in designation, conforming commercial use is recommended.
	W3	2	5.52	84 Lumber - Future redevelopment as a visitor center with a food court. Because of its size and ample frontage on West Main Street, the property could accommodate a large building and a large area of surface parking appropriate for this type of use including a multiplex theater. In addition, the existing rail spur could provide an opportunity in the future for a shuttle train providing "scoot" service.
	W4		0.84	AutoLab - Develop with a compatible commercial use.
	W5	3	16.2	Former Bridge View Duck Farm - Reuse site for residential use or lodging/campground with the provision of sewer or alternative treatment. An alternative to redevelopment that would provide benefit is acquisition for public recreational use.
	W6		1.66	Industrial/outdoor storage - Develop with compatible commercial use of same size building.
	W7		1.33	Vacant Propane Business – Develop for 4,500 square feet gross floor area (gfa) of compatible commercial use. Yield is as per WSRR requirements.

Subarea	Site ID	Strategic Site ID	Acres	Description
Central	C1	4	1.38	Peconic Overlook (Dare to Dream Concept) - This location is envisioned as a gateway to Downtown Riverhead and provides opportunities to be developed collectively as "Peconic Overlook". Consolidate ten parcels and coordinate development which takes into consideration the surrounding restaurants, ice cream shops, and existing residences to provide a cohesive development which not only attracts visitors but also improves the existing land use, water quality and overall environment of this area. The existing residential single family homes are proposed to be re-used as rental cottages, and the existing fish market and restaurant is integrated in the design. The concept plan shows 9,600 SF of mixed retail and a café, an 8,000 SF Bed & Breakfast, a parking lot providing 40 parking spaces surrounding the existing Buoy One fish market and restaurant, a boat/canoe launch, a river walk, and open space with seating areas and picnic tables, and a stormwater management plan designed on the principles of green infrastructure. The plan also includes a landmark (such as a water fountain or something similar) which will emphasize this is a gateway to Downtown Riverhead.
	C2		3.81	Former MOSF Site – Develop in conjunction with C8. Redevelop with 20,000 square feet gfa compatible commercial use.
	C3		3.89	Blackman Plumbing – New showroom with 40,000 square feet gfa approved.
	C4		1.49	National Propane – compatible commercial use of 6,000 sf gfa building.
	C5		10.84	Mix of light industrial/commercial uses. Create a Planned Business Park.
	C6		1.93	Art Sites – develop with alternative compatible commercial use.
	C7	*Note that C7 was eliminated from map/analysis*		
	C8		2.06	Office building – Potential redevelopment site in conjunction with C2. Redevelop with 20,000 square feet gross floor area compatible commercial use.
Downtown	D1	5	3.42	Train Station Block (Dare to Dream Concept) - Redevelop with coordinated mixed-use development. The concept sketch envisions a four (4) story building in the eastern portion of the block providing approximately 30,000 SF of commercial on the ground level and approximately 35,000 SF on each of the upper levels. The 30,000 SF of commercial on the ground level could include 10,000 SF of retail, 10,000 SF of restaurant/eating places, and 10,000 SF of office space. Upper levels are anticipated to be

Subarea	Site ID	Strategic Site ID	Acres	Description
				developed with apartments only of various sizes ranging 900 SF to 1,300 SF. A total of approximately 95 apartment units are envisioned on upper levels. The western portion of the site would be developed with a 4 story parking garage providing approximately 882 parking spaces. Site is located within the Railroad Avenue Urban Renewal Area. Large site could also be used for multiplex theater with parking structure. A change of zone or implementation of an overlay district would be required to allow this level of development. The DC-1 District, which allows a mix of retail and residential use could be considered
	D2		0.74	Vacant building –redevelop with 2,400 SF gfa sit down restaurant.
	D3		0.95	Marathon Motors – Used Car Sales – redevelop with 4,000 SF gfa of compatible commercial use.
	D4		1.82	Grocery Store Site (Dare to Dream Concept) – Redevelop with small format grocery store. Small format grocery stores can range from 10,000 to 20,000 square feet.
	D5		1.08	Fire Department Headquarters – reuse existing building for public use – redevelop with commercial uses and agricultural center.
	D6		47.25	DC-1 District – Rezoning to accomplish reasonable buildout scenario. Redevelopment of DC-1 District to Scenario 2 as described in previous section providing an additional 69,092 SF of retail and restaurant, approximately 54,020 SF of office/other similar use, and approximately 325 additional apartment units.
East	E1		0.52	Vojvoda's Cleaners – Potential for redevelopment with alternative compatible use.
	E2	6	0.22	Sap Enterprises Auto Repair - Because of its location on Sawmill Creek and the pond, the property provides an opportunity for a small gateway park.
	E3	7 and 8	5.94	Gershow Recycling and adjacent towing company – Reuse for residential purposes; consider increasing residential density to encourage redevelopment with conforming use.

A large portion of the western and a smaller portion the central subareas of the Brownfield Opportunity Area (BOA) Study Area are within the boundary of the NYSDEC-designated Peconic River Recreational River corridor (refer to **Figure 3-3**). The existing stringent regulations on development have been identified as a major obstacle to redevelopment within these portions of the BOA Study Area. The existing "Recreational" designation effectively prohibits industrial/institutional/commercial use development (with the exception of river-related retail) and only allows residential use on a minimum 2-acre lot.

The "Community" designation (which is also protective of the river in appropriately applied areas) would allow limited industrial/institutional/commercial development. This is more in keeping with existing land use and goals for the area as expressed in this BOA Study. The WSRR provides minimum criteria which must be met for Community River designations. A separate analysis (see **Appendix B**, WSRR Analysis and Application to NYSDEC) was conducted to assess the potential to change the designation from the "Recreational" to "Community" classification, for certain properties located along the Long Island Railroad (LIRR) right-of-way and/or along West Main Street in Riverhead between the east end of I-495 and Mill Road. The result of the analysis revealed that there is potential for a new community designation which, if approved by the DEC, would apply to a total of 51 parcels including one (1) parcel of LIRR right-of-way and West Main Street[60].

4.1.1 Western Subarea

The Western Subarea extends from the western Study Area boundary east to Mill Road. This subarea is fairly rural in character at its western end and transitions to a mix of commercial, light industrial and residential uses towards the Central Subarea. In the more rural portion, land uses include vacant properties, protected open space, former duck farms, a hotel, and a mix of light industrial, commercial and residential uses fronting on West Main Street (generally on the north side). Below are specific issues and opportunities identified for this subarea:

Strategic Site #1 (Dynamic Auto) and Alternative Development Scenario Map ID W2

This property is prominent along the corridor as it is the first property located within the BOA Study Area that one encounters along Route 25 at its westerly end. This site was selected as strategic due to its prior and current land use as an automotive service facility and its prominence as a gateway to the Study Area and downtown. The site is approximately 1 acre in size and is classified "Recreational" under the DEC WSRR. NP&V recommended that this site be redesignated to "Community" which would allow the property to be developed for other uses than allowed at present; however, based upon NYSDEC input on the application for Community designation, it was learned that this site would not be supported for redesignation due to its remote location from the balance of the proposed Community area. Thus, the amended application to the DEC does not include this property. During discussions, NYSDEC staff noted that the redevelopment of this site for an alternative commercial use would be considered, due to its preexisting nonconforming status. A conforming commercial use is recommended and with mitigating features is expected to be feasible. Due to the prior and existing land use, a Phase I ESA is recommended prior to redevelopment to identify potential for environmental contamination of soils and groundwater and provide direction related to necessary testing.

[60] Which includes two separate "lots".

Strategic Site #2 (84 Lumber) and Alternative Development Scenario Map ID W3

This former commercial lumberyard is developed with a large storage building which would likely be demolished to support redevelopment on the site. The site is within the WSRR Recreational area which significantly restricts re-use and NP&V recommends that the parcel be reclassified to "Community". The site is a relatively large parcel (approximately 5.5 acres in size), is highly visible, is located adjacent to an existing rail spur and is in close proximity to the Tanger Outlet Center. These factors present a great opportunity for future redevelopment as a visitor center with a food court. Because of its size and ample frontage on West Main Street, the property could accommodate a large building and a large area of surface parking appropriate for this type of use. In addition, the existing rail spur could provide an opportunity in the future for a shuttle train providing a transit link to the downtown train station - and beyond. As recent as 2012, the LIRR was considering the possibility of providing "scoot" service as a way to increase service opportunities and ridership in eastern Suffolk County.

> In the long term, an old steam train could evolve into a major attraction for families and a unique way to encourage Tanger Mall shoppers to make a visit to Riverhead Downtown. An example of a tourist based rail line is located in Mt. Dora, Florida where a steam train travels back and forth between Mt. Dora and Tavares - the train, known as the Orange Blossom Cannonball Express is wholly a tourist attraction - and is very successful. More details regarding this concept are presented in **Section 4.5.3**.

During the outreach, the public also expressed a strong desire for a multiplex in Downtown Riverhead. Several possible sites within the downtown and surrounding area were analyzed conceptually for providing sufficient space for the structure and parking; a site of this size could support a theater.

Strategic Site 3 (Former Bridge View Duck Farm) and Alternative Development Scenario Map ID W5

The Bridge View Duck Farm operated on this site between 1966 and 2001. The site consists of 3 separate tax parcels and is approximately 16 acres in size. This highly visible site on the south side of West Main Street is now overgrown and contains several abandoned deteriorating buildings, three of which are clearly visible from the roadway. The property is located adjacent to the west of a LIPA Row and Suffolk County Parkland and has frontage on the Peconic River.

There are areas of freshwater wetlands on the property which would need to be flagged and surveyed to determine the actual redevelopment potential of the property. The WSRR Recreation designation limits use on the property to residential and limited recreational related retail. Input from DEC Region 1 was obtained regarding the potential for river oriented lodging and it was indicated that such use is compatible with the regulations. The former use as a duck farm could have resulted in subsurface contamination and nutrient rich soil from duck waste contributing to a high nitrogen load to the river. Reuse of the site for a form of residential use with the provision of sewer or alternative treatment or river oriented lodging is recommended.

The property owner is exploring the feasibility of a seasonal camping facility that would include a mix of RV pads with utility hookups, tent sites, and lean-tos (or platform tents) similar to those shown in the image here.

Image courtesy of Parks Canada Website[61]

Part of the vision for reuse of the former duck farm is the creation of scenic river access trails & riverfront amenities for fishing and boat access, as well as to restore a duck pond as a swimming hole. The property owner is also considering the incorporation of arts and educations components such as an art park, small museum and/or nature education facility.

It is noted that residual waste products from the prior duck farm use (consisting of buried remains, duck sludge) could remain on the site and if present would need to be removed prior to redevelopment. Another benefit that can be achieved through the redevelopment of this site is the removal of invasive species (namely *phragmites australis*) and revegetation of the shoreline with native vegetation that can provide habitat and food sources for local wildlife.

If redevelopment proves to be infeasible, an alternative to redevelopment that would provide benefit is acquisition for public recreational use.

4.1.2 Central Subarea

This subarea is located east of Mill Road along Route 25, to just west of Nugent Drive/CR-94. The western part of this subarea is developed with commercial uses including restaurants, car repair shops, and retail and service businesses. The development density gradually decreases toward the east along West Main Street with mostly single family residential homes along the corridor. The eastern portion of this subarea includes car dealerships and is considered a gateway to downtown Riverhead. The subarea has at least two clear views of the river from West Main Street and sites where there is the potential for enhanced river views. The following provides specific issues and opportunities identified for this subarea:

[61] http://www.pc.gc.ca/eng/voyage-travel/hebergement-accommodation/otentik.aspx

Strategic Site #4 - Peconic Overlook (Specific Site Redevelopment Concept) and Alternative Development Scenario Map ID C1

The intersection of W. Main Street and Mill Street includes certain non-conforming uses including auto repair establishments and outdoor storage/ contractor yard. The "Peconic Overlook" area is outlined in bold yellow on the aerial below, and is comprised of ten (10) parcels. The existing land uses include three (3) single family residential homes, an existing fish market and restaurant, office, contractor yard/ outdoor storage areas, and auto repair shop. An existing ice cream shop and small restaurant are located across the street and another existing restaurant is located to the east within walking distance of the site. In addition to conflicting land uses and a relatively poor pedestrian environment, the site aerial also shows land disturbance in close proximity to the Peconic River contributing to deterioration of water quality. This entire area is currently located within the WSRR corridor "recreation" designation which prevents any non-residential use[62]. The subject site is included in the proposal for a WSRR change to the "community" designation[63] which would open new opportunities for redevelopment of this area.

Peconic Overlook – Existing Site Aerial
Source: NYS GIS Orthoimagery, 2013 and Town of Riverhead Tax Parcels

[62] WSRR corridor "recreation" designation allows residential and river oriented commercial such as gift shop, canoe launch etc. These regulations limit the opportunity of the existing non-conforming uses.
[63] WSRR change in designation from "recreation" class to "community" class is proposed for fifty-one (51) parcels including ten (10) parcels of subject site and is provided in **Appendix B-2.**

This location is envisioned as a gateway to Downtown Riverhead and provides opportunities to be developed collectively as "Peconic Overlook" as illustrated in the conceptual sketch provided on the following page. The plan considers consolidation of these ten parcels and a coordinated development which takes into consideration the surrounding restaurants, ice cream shops, and existing residential to provide a cohesive development which not only attracts visitors but also improves the existing land use, water quality and overall environment of this area. The existing residential single family homes are proposed to be re-used as rental cottages, and the existing fish market and restaurant is integrated in the design.

The concept plan shows 9,600 SF of mixed retail and a café, an 8,000 SF Bed & Breakfast, a parking lot providing 40 parking spaces surrounding the existing Buoy One fish market and restaurant, a boat/canoe launch, a river walk, and open space with seating areas and picnic tables, and a stormwater management plan designed on the principles of green infrastructure. The plan also includes a landmark (such as a water fountain or something similar) which will emphasize this is a gateway to Downtown Riverhead. In order to limit the land disturbance, as envisioned the existing foundations would be reused. The areas adjacent to Peconic River are shown as replanted and revegetated and a storm water management feature is illustrated at the southeast corner of the site to provide combined onsite drainage and water feature. Care needs to be taken to avoid further filling the 100-year floodplain.

Existing residential structures to be converted for rental cottages
Pervious Pavement: Surface Parking
40 Parking Spaces
Pedestrian crosswalk to existing restaurant and ice cream shop
Existing Fish Market and Sea Food Restaurant
Retail, gift shop restaurant, coffee shop and similar
1,600 SF/each
Total 9,600 SF
Peconic Overlook Landmark (Waterfountain or similar)
DEC WSRR "COMMUNITY" Regs:
Max. Lot Coverage: 10%
Min. Setback from public road: 100'
Max. Height: 34'
Zoning Regs (PRC District):
Min. Lot Area: 80,000 SF
Max. Building Coverage: 20%
Max. Impervious: 40%
Max. Building Height: 34'
Max. FAR: 0.40
Min. Front Yard: 25'
Min. Side Yard: 15' each/ 30' combined
Min. Rear Yard: 50'
Peconic Overlook Sketch:
Current Zoning: RFC (Riverfront Corridor)
Lot Area: Overall approx. 60,000 SF
Building Coverage: Approx. 40%
FAR: Approx. 0.4
Impervious Coverage: Approx. 50%
Various zoning relief and/or a new overlay district, and/or WSRR variance may be required.
Sustainable development incorporating LEED building design features and green infrastructure is recommended.
Riverwalk
Existing Vegetation
Private and Rental Boat/ Canoe Launch
Stormwater Management
(Sustainable Green Infrastructure)
Bed & Breakfast
8,000 SF
(Reuse Foundation of Existing Structure)
Reuse Foundation of Existing Structure
Replanting and Revegetation Area
NPSV
PECONIC OVERLOOK
RIVER ORIENTED RECREATION (MILL ROAD & W. MAIN STREET)

4.1.3 Downtown Subarea

East of Nugent Drive/ CR-94 to Howell Lane). The downtown area exhibits a mix of cultural, commercial, office, and institutional uses along the Main Street corridor. The northwestern portion of the downtown subarea includes mainly offices, small retail and institutional uses such as Suffolk County Court and offices. The northeast portion of the downtown is generally residential. Downtown area also includes some of the area's major attractions such as the Long Island Aquarium and Suffolk Theatre, as well as designated historic structures, including the Suffolk County Historical Society on the west side of the downtown subarea. Below are specific issues and opportunities identified for this subarea:

Alternative Development Scenario Map ID D6/(DC-1 Main Street Zoning District)

The existing DC-1 district consists of 112 parcels (approximately 47 acres) based upon Town of Riverhead GIS parcel data. The current DC-1 district zoning code provisions allow for 80 percent building coverage with a Floor Area Ratio (FAR) of 4.0. Additionally, this zoning district includes a provision to further increase density to 100 percent building coverage (FAR of 5.0) by special permit issued by the Town Board[64]. It is noted that the code includes no specific development requirements or provisions to provide guidance for the Town Board in granting a special permit for this increase in density. The implementation of development under these bulk regulations would permit a much higher density in the DC-1 district and may not be feasible given the limitations of existing infrastructure which can only support a certain level of development within the downtown.

Analysis of the code provisions using a build-out scenario was prepared and is provided in **Appendix I**. Alternative development scenarios were also generated with reduced bulk requirements for comparison. The analysis included a review of form-based development parameters, provisions for an open space requirement, requirement of on-site parking (currently none required within the parking district), and bonus density provisions for projects developed under the principles of LEED criteria as published by US Green Building Council (USGBC). The limit of 500 residential units in the DC-1 district was also analyzed.

Strategic Site #5 (Train Station Block) and Alternative Development Scenario Map ID D1

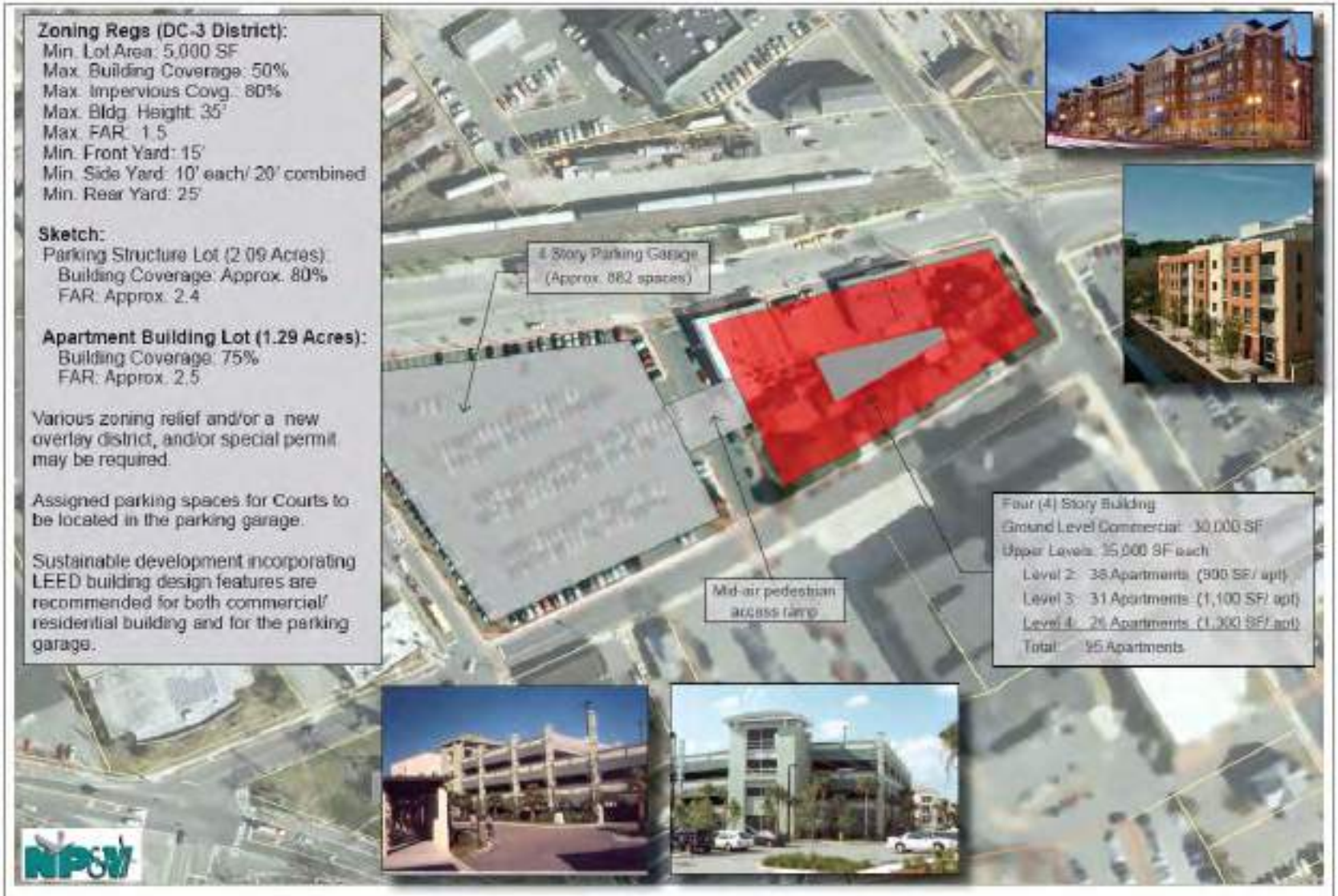
The block located along the north side of Court Street between Osborn Avenue and Griffing Avenue, south of Railroad Avenue is comprised of twenty one (21) parcels (see aerial) and is within the Railroad Street Urban Renewal Area. The western portion of the block is a surface parking lot owned by the Town of Riverhead, of which most is designated parking for the Suffolk County courts located to the south of the subject site. The eastern portion of the block is developed with a retail market, a barber shop, vacant store fronts, few residential homes, and (insert the name of the corner building). While this block has tremendous opportunity due to its proximity to the train station, it appears to be underutilized.

[64] It is noted that the Table of Dimensional Requirements notes a requirement for TDR for increased density to 100%, as was recommended in the Comprehensive Plan. However, no code provisions are provided to support this and there is no TDR program established that includes the DC-1 District as a receiving zone for TDR credits.

Train Station Block and Vicinity – Existing Site Aerial
Sources: NYS GIS Orthoimagery, 2013 and SC Real Property GIS Parcel Database

Redevelopment of this area to a coordinated mixed-use development is envisioned and illustrated on the sketch on the following page. The concept sketch envisions a four (4) story building in the eastern portion of the block providing approximately 30,000 SF of commercial on the ground level and approximately 35,000 SF on each of the upper levels. The 30,000 SF of commercial on the ground level could include 10,000 SF of retail, 10,000 SF of restaurant/eating places, and 10,000 SF of office space. Upper levels are anticipated to be developed with apartments only of various sizes ranging 900 SF to 1,300 SF. A total of approximately 95 apartment units are envisioned on upper levels.

The western portion of the site would be developed with a 4 story parking garage providing approximately 882 parking spaces; the need for a parking garage evolved from the evaluation of alternative development scenarios, as described in **Appendix I**. This parking garage is designed not only to provide parking needs of the proposed mixed-use building but also provides designated court parking. The parking analysis conducted as part of this project (see TOD Growth Plan under separate cover) finds that designated court parking is located throughout the Downtown Riverhead and it occupies parking which could otherwise be used by visitors to the downtown, business owners, employees and customers. The idea of structured parking is to consolidate and provide designated parking for the courts and new development to free up designated spaces closer to Downtown Riverhead.



COORDINATED MIXED USE CONCEPT

TRAIN STATION BLOCK

Alternative Development Scenario Map ID D4 (Grocery Store Concept)

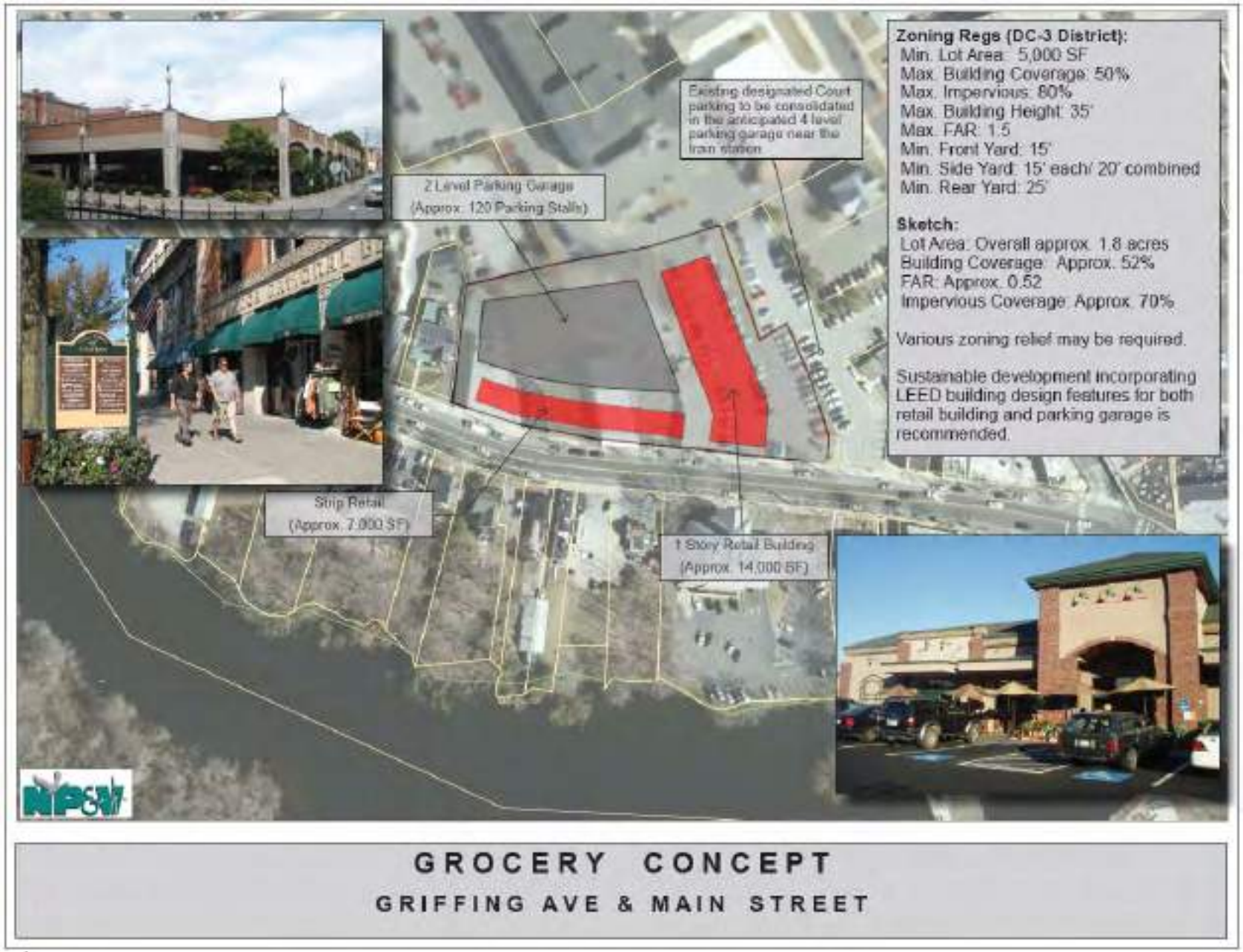
The following provides an overview of a conceptual plan generated for a grocery store which was developed in response to a strong desire from the public for a grocery store in the downtown area. The assessment evaluated space needs for a small format grocery store (including floor area and parking area) and identified a group of properties that could provide an opportunity in the future if redevelopment was pursued (or if another site of similar size is identified). As noted in Supermarket News, small format grocery stores are on the rise, as the trend increases for customers to make more frequent trips and make smaller purchases. The trend is also being driven by consumers wanting to eat healthy and buy fresh produce, also driving up the number of trips made in a week. Small format grocery stores can range from 10,000 to 20,000 square feet.

The site incorporates two Town-owned parking areas which are used for court parking and if implemented would require that parking be provided for the court visitors in addition to parking for the retail customers and employees. The concept was revealed at the second community workshop as part of a "Dare to Dream" scenario. This concept would require a public private partnership, as well as the consolidation of private properties to support the implementation. This site's potential is enhanced in that the Town controls two of the parcels which could be consolidated. The concept could further be pursued by the Town actively entering into a dialogue with grocery store operators and determining if there is an interest, and communicating with the adjoining property owners as to whether they would be interested. Further, the Town could, on its own initiative, prepare a site plan for a potential operator, and conduct the SEQRA evaluation in advance, to be able to advance a "shovel ready" site. The BOA Study also finds that there may be other locations in the downtown which could support a small format grocery store. The feasibility of the use of any other site would depend on a number of factors, including compatibility with adjoining land uses, consistency with other goals including historic preservation and protecting historic properties, and other considerations. The following is but one option which the Town could pursue.

Grocery Concept – Existing Site Aerial

The conceptual study envisioned redevelopment of this area to support a 14,000 SF grocery store and approximately 7,000 SF of mixed retail along with 2 story parking garage providing approximately 120 parking spaces.

It should be noted that a grocery store could be incorporated into the parking garage itself as well. (See image of a Whole Foods incorporated into a parking garage in historic neighborhood in Philadelphia).



GROCERY CONCEPT

GRIFFING AVE & MAIN STREET

4.1.4 Eastern Subarea

The eastern subarea includes parcels fronting on East Main Street east of Howell Avenue and extends to the BOA Study Area's eastern boundary on Hubbard Avenue. This area includes a mix of uses including residences, a multifamily housing complex, offices, retail, service, and institutional uses along Main Street and one light industrial use and a mobile home park on Hubbard Avenue. The land use recommendations for the eastern subarea are related to three properties, one which is envisioned as a new gateway park as two sites as a new townhome community (which could occur separately, though ideally would be coordinated as a single site redevelopment).

Strategic Site #6 (Sap Enterprises Auto Repair) and Alternative Development Scenario Map ID E2

This property is located on the north side of East Main Street and on the west side of Sawmill Creek and a small pond. The parcel is approximately 0.22 acre in size and is zoned RA40 (Residential) but is developed with an auto repair business, a nonconforming use. The Town of Riverhead maintains an easement across the east side of the property for access to Sawmill Creek[65].

This site was identified as a potential brownfield site in the original grant application for the BOA Program due to its use and the database search identified a history of spills on the site (all closed). Because of its location on Sawmill Creek and the pond, the property provides an opportunity for a small gateway park.

It is recommended that the Town consider acquisition of this site for the purpose of providing a gateway park. Prior to acquisition of the site, a Phase I ESA would be required and Phase II testing would likely be recommended to identify presence of environmental contamination on the site.

Strategic Sites #7 & 8 (Gershow Recycling and adjacent towing company site) and Alternative Development Scenario Map ID E3

This site consists of two separate tax parcels. The western parcel has its address at 965 East Main Street (SCTM # 131-1-1.1) and is an auto towing business. The site is listed as a petroleum bulk storage facility with one underground storage tank. The eastern parcel is located at 27 Hubbard Avenue and is developed with the Gershow recycling facility. This use has been identified as an incompatible land use in consideration of the surrounding residential uses along Hubbard Avenue and a more compatible use has long been recommended - including in the Town Comprehensive Plan which resulted in the change of zone to the Commercial Residential Campus (CRC) District.

The two properties total approximately 5.9 acres in size. The western property is located within the Riverhead Sewer District, but the Gershow property is not with the District. Based upon the

[65] Based upon discussion with Town Councilman John Dunleavey

current dimensional regulations and a floor area ratio of 0.2 (for development without a public sewer), the site could yield 51,400 SF of floor area. Assuming 1,800 SF average size of a townhome without sewer connection, this site would yield approximately 28 townhomes[66].

Under the code provisions the yield could also increase significantly (to FAR .50) if the property were connected to the sewer district. However, based upon a footnote in the Commercial Districts Schedule of Dimensional Regulations, within the CRC zoning district, residential yield is to be calculated at one dwelling unit per 40,000 SF of lot area, which restricts the density to 6 units. It is expected that the return on investment for 6 townhomes would not provide the necessary economic incentive for the property owners to encourage redevelopment. To encourage the redevelopment of the properties with a compatible use, it is recommended that the provisions of the CRC District be revisited to consider increasing the allowable residential density. It is noted that based upon a review of the seven CRC Districts in the Town of Riverhead, the only one that is developed with residential units is the Millbrook Apartment complex which is located within the study area. The density of this development far exceeds the residential yield for this zone (the property is over 6.5 acres in size and the complex contains 9 separate buildings, each with multiple units). It is recommended that the Town study the development restrictions placed on this zoning district to determine if it is consistent with the goals for this zone.

Since the property is located on Sawmill Creek, a tributary to the Peconic Estuary, and groundwater recharged from this site reaches surface water within 2 to 4 years, redevelopment needs to be sensitive to the potential impact on water quality. Thus, if this property were redeveloped with residential use in the future, it is recommended that the property be connected to the sewer district to reduce the potential for impact on surface water quality[67].

[66] It is noted that the yield per FAR would not be permissible without treatment of wastewater under Article VI of SCSC.
[67] Based upon discussions with the District Commissioner such an extension would be feasible.

4.1.5 Sustainable Development Density Bonus

As described in **Appendix I-1**, sustainability promotes development practices that result in buildings that are healthier to occupy, less expensive to operate and more responsible to the environment. Sustainable developments designed on the principles established by LEED could be encouraged through a bonus density incentive program.

Leadership in Energy and Environmental Design (LEED) is a rating system that measures the design, construction and operation of high performance green buildings, homes and neighborhoods. LEED was developed by the U.S. Green Building Council (USGBC) to guide the building industry and provide standards for sustainability for a variety of building projects. In LEED certification scoring, there are 136 possible base points distributed across five major credit categories: Sustainable Sites, Water Efficiency, Energy and Atmosphere, Materials and Resources, Indoor Environmental Quality, plus an additional 6 points for Innovation in Design and an additional 4 points for Regional Priority.

The implication for redevelopment and recommendations related to water quality recommends the additional need for actions beyond the MS4 requirements to reduce nitrogen and pathogen inputs to the Peconic River. Use of low-impact development techniques for new development and redevelopment projects are recommended including green storm water infrastructure (such as bio-retention areas and rain gardens) use of permeable pavers or other pervious surfaces, provision of natural buffers, particularly in areas proximate to wetlands, use of green roofs, use of native species in landscaping, and limiting the use of fertilizer dependent vegetation on sites. Thus, local and regional environmental challenges are also considered for bonus density criteria.

A sample rating system is provided in **Appendix I-3**.

4.1.6 Transfer of Development Rights Program

A follow up study to establish a TDR program is recommended that would to encourage preservation within the sending area which would constitute the south side of NYS Route 25 along West Main Street, and provide additional density in the DC-1 zoning district (and potentially other sewered areas within the Downtown), which serve as the receiving area. This program would need to ensure that it is equitable and even advantageous to transfer density from “sending parcels” to “receiving parcels.” Such a program could situate development more appropriately, and potentially assist with revitalization of this corridor in a prescribed manner. The program would also provide environmental benefits such as great open space in the more sensitive areas of the corridor, and improved methods for handling sanitary waste with discharges farther from the river.

A TDR program is complex in that it must be enabled by Town zoning, and be consistent with comprehensive planning goals, but must also consider the myriad of additional regulations (Suffolk County Sanitary Code, WSRR, wetlands protection laws, flood plain development considerations and so on), while still providing a framework to provide economic viability and incentives to induce landowners to participate.

4.1.7 Potential Candidates for Site Assessment Funding

Step III of the NYSDOS BOA Program provides funding for implementation strategies identified through preparation of a Step II Nomination Study. Upon acceptance of a Nomination, the Town of Riverhead may submit an application for project advancement to complete a Step III Implementation Strategy and/or Site Assessments (subject to funding availability) which can include Phase I Environmental Site Assessments and Phase II Testing. The remedial investigations can then be used to design a conceptual level remediation strategy for priority sites. There are a number of sites that could potentially be candidates, with consent of the property owner, for site assessment funding identified in this Nomination. This includes all of the properties identified as Strategic Sites (see **Figure 3-9B**) as well as several properties whose past or present land use may have resulted in environmental contamination and whose redevelopment would be a benefit within the Study Area. A list of properties that should be considered as candidates for funding of site assessments is provided in **Table 4-1B** and are illustrated on **Figure 3-9A**. Note that shaded rows indicate those properties which have been identified as Strategic Sites.

TABLE 4-1B
POTENTIAL CANDIDATES FOR SITE ASSESSMENT FUNDING

ID #	Address	Tax Map Number (s)	Land Use	Discussion
1	2011 River Road	118 – 4 – 5.10	Former Olin Warner Duck Farm	Prior duck farm use potentially impacting water quality of the Peconic River. Not a highly visible site; however, redevelopment of the site with residential or river recreational/lodging permitted under zoning. The property is currently developed with a single family residence.
2	1863 West Main Street	118 – 4 – 8.1	Auto Repair	Strategic Site #1. The property is developed with an auto service use and an accessory use of a cell tower. Many automobiles are parked outside on the site. This property would be a priority for redevelopment due to its high visibility at the gateway of the Route 25 corridor leading into downtown Riverhead. WSRR regulations constrain redevelopment.
3	1751 West Main Street	118-4-10	Former 84 Lumber	Strategic Site #2. Vacant lumberyard which contains several warehouse buildings. The property has high visibility on the corridor. WSRR regulations currently constrain redevelopment.
4	1681 West Main Street	118 – 4 – 11	Auto Repair	This is a site whose redevelopment would be desirable to improve aesthetics in the gateway area to the downtown. The site has a small building and many vehicles and equipment stores outside. WSRR regulations constrain redevelopment.
5	1501 – 1595 West Main Street	119 – 2 – 56-58	Former Bridge View Duck Farm	Strategic Site #4. This is a highly visible site on the south side of West Main Street. It is an abandoned duck farm property and contains several deteriorated structures visible from the roadway and

ID #	Address	Tax Map Number (s)	Land Use	Discussion
				is overgrown. Wetlands and WSRR regulations constrain redevelopment.
6	Forge Road	139-1 (multiple lots)	Forge Road Mobile Home Park	This mobile home park is located on the Peconic River and was constructed prior to Suffolk County Sanitary Code requirements for single family residential on site sanitary systems. The mobile home park is well maintained by its owners. However, it is expected that water quality would benefit from connection of the area to Riverhead's STP or an alternative wastewater treatment system.
7	1175, 1161, 1167, 1153-1159, 1165, & 1141 West Main Street	125 – 2 – 25.2, 26.2, 27.2, 27.3, 27.5, & 28	Mix of uses including auto repair	Strategic Site #4. This group of sites include auto repair uses and mix of contactor uses, office and restaurant uses situated on the Peconic River. The group of sites was identified as potential redevelopment area with a concept for coordinated redevelopment prepared. WSRR regulations and need for sewage treatment options constrain redevelopment.
8	656 West Main Street	124 – 3 – 17	Ice and fuel company	The existing land use at this property includes fuel storage. The business is in operation and there is no indication that the property is to become available for redevelopment. It is noted that redevelopment would require site investigation and possible testing to determine presence of environmental contamination from past and current use of the property.
9	626 West Main Street	124 – 3 – 21.1	Gas Station	The property is developed with a gas station which was recently upgraded and thus is not expected to be a candidate for redevelopment in the near future. However, redevelopment would require site investigation and possible testing to determine presence of environmental contamination.
10	504 West Main Street	128 – 2 – 4	Auto Repair (Vacant)	This property contains an abandoned auto use. It is a small property (approximately 0.2 acre) with limited potential for redevelopment to act as a catalyst for other development. Redevelopment would require site investigation and possible testing to determine presence of environmental contamination.
11	205 Osborn Avenue	128 - 2 - 22	Medial Office (Vacant)	This property contains a long vacant building formerly used for radiology. The location is significant in the context of potential reuse of the Town railroad parking lot for development or the realignment of Court Street and Nugent Street for improvements at that intersection which is currently offset.
12	Block bounded by	128 – 3 – 12.1, 12.2, 12.3,	Town owned surface	Strategic Site #5. This is a group of sites that includes the Town of Riverhead parking lot

ID #	Address	Tax Map Number (s)	Land Use	Discussion
	Railroad Avenue, Court Street, Osborn and Griffing Avenues	13.0, 14.0, 15.0, 17.1, 18.0, 19.0, 20.0	parking and mix of uses (residential, retail, office)	adjacent to the train station and the adjacent block, which contains a mix of retail, residential and office uses. The surface parking area and potentially the adjacent block provide a unique opportunity for a coordinated redevelopment.
13	305 West Main Street	128 – 3 – 48, 49	Auto Repair (Vacant)	This former auto repair has been vacant for many years. Redevelopment would require site investigation and possible testing to determine presence of environmental contamination related to the former use of the site.
14	243-255 West Main Street	128 – 3 – 50, 51	Auto Repair (Vacant)	As with the neighboring site, this is a former auto repair use, and redevelopment would require site investigation and possible testing to determine presence of environmental contamination.
15	415 East Main Street	129 – 4 – 17	Gas Station Auto Repair	This property is an active gas station with a central location in the downtown; redevelopment would require site investigation and possible testing to determine presence of environmental contamination.
16	712 East Main Street	127 – 4 – 32.2	Dry Cleaners	Active dry cleaner use with no indication that the business seeks to cease operations. Redevelopment would require site investigation and possible testing to determine presence of environmental contamination.
17	944 East Main Street	109 – 2 – 13	Auto Repair	Strategic Site #6. Property is developed with an auto repair business which is located on the headwaters of creek which is a tributary to the Peconic River and is considered important as a gateway site at the east end of the study area. Redevelopment would require site investigation and possible testing to determine presence of environmental contamination.
18	965 East Main Street	131 – 1 – 1.1	Auto Towing	Strategic Site #7. Property developed with an auto related use; redevelopment would require site investigation and possible testing to determine presence of environmental contamination. Important as gateway site.
19	27 Hubbard Avenue	131 – 1 – 2.2	Recycling Yard	Strategic Site #8. Property developed with recycling operations center which includes crushing operations. Redevelopment would require site investigation and possible testing to determine presence of environmental contamination. Site use has a history of complaints as a nuisance use for surrounding property owners.

4.2 Water Resources

4.2.1 Expanded Sewage Treatment

The Sewage District and available capacity provides opportunities for redevelopment in the downtown and surrounding areas. Based upon the design flow multipliers for the uses analyzed for Scenario 2 - the higher density alternative, the approximate flow would be less than 150,000 gallons per day, including those properties which are outside of the sewer district currently (most significantly the recommended multifamily use on Hubbard Avenue). The sewer district currently has a 1.2 million gpd capacity and utilizes approximately 900,000 gpd and thus, there is sufficient capacity for the additional development.

However, much of the Study Area is outside of the Sewer District and utilizes on site sanitary systems, many of which predate current SCDHS standards and may have be impacting impact the Peconic River's water quality. There are two specific recommendations with respect to sewage treatment.

Extension of the Sewer District to Mill Road
Extension of the sewer district west of Raynor Avenue to at least the Mill Road area should be considered in support of the redevelopment at the proposed new Community designated area on the south side of Route 25 (see **Section 3.2.8**). It is recommended that the Town support an engineering feasibility study and cost benefit analysis. However, if this area becomes a sending area as part of a TDR program, the need for expansion may be more limited or not necessary.

Forge Road Mobile Home
The Forge Road Mobile Home property was identified as a high priority for connection to the sewer district (or provision of treatment using an alternative method) (see **Section 3.2.8**). This property has been identified as a likely contributor of high nitrogen loads to the Peconic River (due to a number of factors such as density of development, year constructed, proximity to the river, and high groundwater). It is recommended that the Town support a feasibility study to determine potential solutions and costs to providing wastewater treatment to this area.

4.2.2 Surface Water Quality Improvements

Stormwater
Stormwater runoff can be a major conveyor of pollutants to the Peconic River, at times delivering high levels of nutrients, pathogens, heavy metals, and hydrocarbons to surface water without any opportunity for attenuation. Bioswales or rain gardens provide a means of diverting stormwater and filtering pollutants, while providing an attractive feature in the landscape.

The entire BOA Study Area was reviewed for potential "Green Infrastructure" opportunities. The benefits of installing recommended green infrastructure practices that capture the water quality volume of water from storm events is the significant reduction of direct pollutant discharges to the Peconic River. Pathogens, heavy metals, and hydrocarbons can be nearly entirely attenuated in the bio-retention basins, swales and tree trenches. Nutrients in stormwater

will be utilized by plants, preventing direct discharge to the Peconic River and thereby significantly reducing the nitrogen loading to groundwater and eventually the Peconic River. Twenty locations were identified throughout the BOA area, and one location is recommended outside of the BOA boundary. In the western and central subareas, where the area is generally less developed with less impervious surfaces, and thus the focus of green infrastructure is directed towards restoration, buffers and infiltration in open spaces. Thirteen of the total twenty-one locations are within the Downtown subarea and implementation of green infrastructure here will have the most benefit of direct pollutant attenuation for improving water quality of the Peconic River. The recommendations within the eastern subarea also have a high level of impervious surfaces and the green infrastructure practices focused on within this area are bio-retention basins, swales and tree trenches along or within parking lots and along roadways. **Figures 4-1A - 4-1E** provide the locations where green infrastructure measures are feasible and details, including before and after photo simulations for two sites. Four locations, three publicly owned and one private, were examined to determine the potential reduction of pollutants that could be achieved thereby reducing contributions to the Peconic River. The concepts involve the diversion of stormwater to surface detention areas that include vegetation primarily (i.e., bio-retention basins, swales and tree boxes) or secondarily to subsurface detention facilities (i.e. pervious pavement and underground storage).

Stormwater nutrients would be removed through biological and chemical reactions naturally. Bioretention and tree boxes are the preferred method for treatment. The key locations for capturing stormwater will be the islands and the boulevards.

The key tasks are: identifying locations where stormwater can be diverted; ensuring proper invert elevations so that stormwater flows by gravity; evaluating the size of the contributing watershed and volume of stormwater generated by a typical event; providing sufficient area of plantings for nutrient removal; and, providing a means of recharging treated stormwater. The Center for Watershed Protection's 2013 Watershed Treatment Model was utilized to calculate the following pollutant load reductions[68] for the four locations below, which were chosen because of their large percentages of impervious surfaces within their respective watershed areas. See **Table 4-2** for estimated pollutant load reductions that could be achieved through implementation of these projects.

Riverfront Park: (**Figure 4-1B**, Project #5). This property has direct discharge with the Peconic River due to proximity. The park has a large parking lot for visitors, where the focus of the examination was directed. Not targeted are the roadway and the park walkway systems near the river due to park visitor experience, walking areas, and depth to groundwater concerns. Focus was towards the parking lot islands and boulevards and secondarily towards pervious pavement. The area of parking examined was 3.3 acres with approximately 20 percent of the area in islands and boulevards. To capture the water quality volume, 50 percent of the islands and boulevards would be converted into bio-retention and/or tree boxes. The site has the potential to capture and treat the entire water quality volume of stormwater generated.

Former Fire Station: (See **Figure 4-1B**, Project #7). This property consists entirely of impervious surfaces. The roof and the parking lot directs stormwater into catch basins on site or

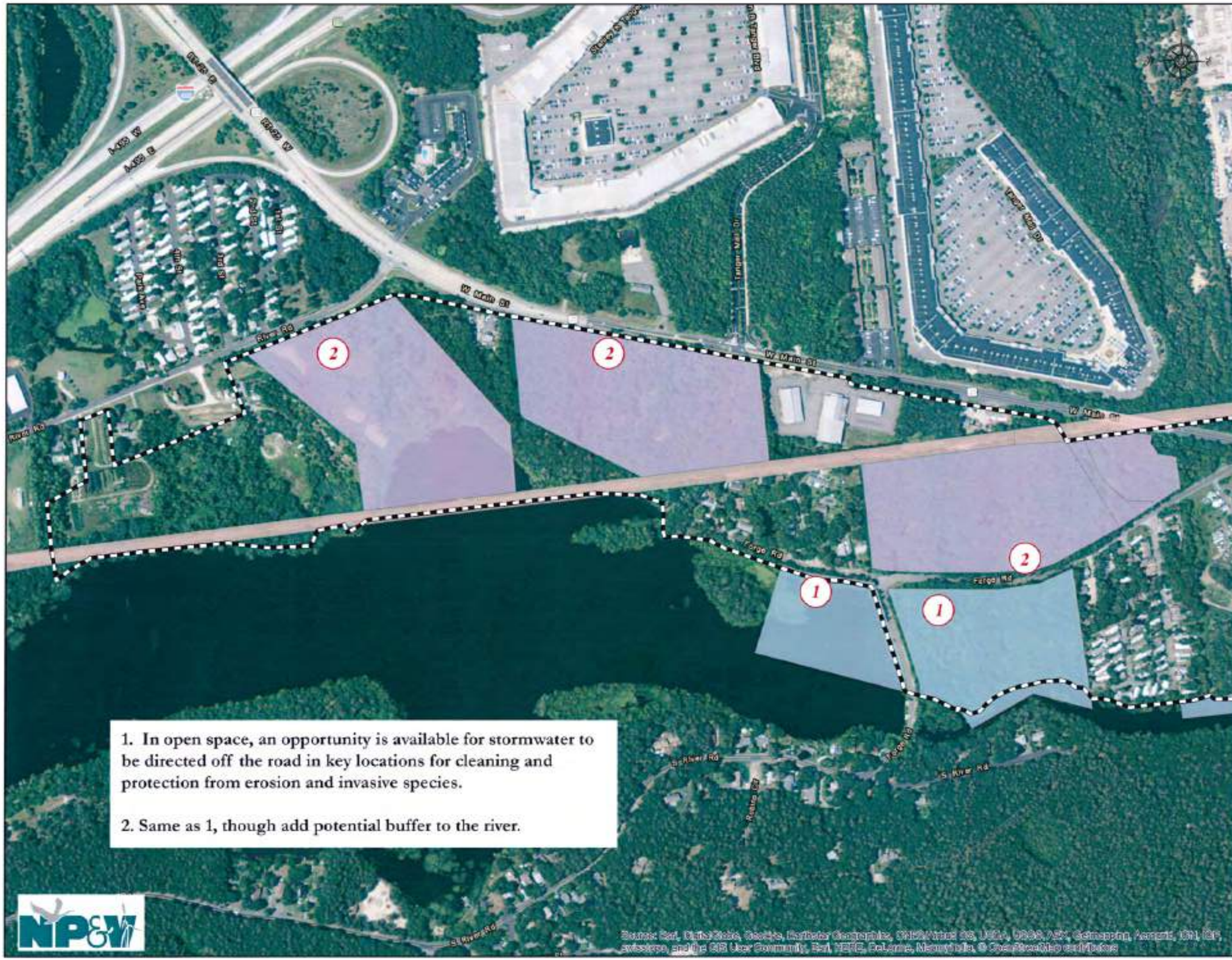
[68] The water quality volume assumed in this examination is the 1.5 inch – 24-hour storm event.

to East 2nd Street. Bio-retention and/or tree trench islands can be incorporated to treat the stormwater within the parking lot. It is recognized that the area in the front of the building on would be more difficult, however, it is anticipated that the potential for installation of a bio-retention island between the front doors or on the west corner of the parking lot is possible. The area of the site is 1.08 acres with approximately 33 percent of the area as roof. To capture the water quality volume in the parking area, about 4,000 cubic feet of storage is needed and the roof would need an additional 2,000 cubic feet of storage.

Town of Riverhead
Peconic River/Rt. 25 Corridor

NYS BOA Step II
Nomination

FIGURE 4-1A
Green Infrastructure Opportunities Western Sites


W Main St
River Rd
Forge Rd
S River Rd
Reeve Rd
Trigger Way Dr
Exit 73 Main St
Exit 73 Middle St
Exit 73 Peconic Ave
Exit 73 Pine St
Exit 73 Elm St
Exit 73 Ash St
Exit 73 Birch St
Exit 73 Oak St
Exit 73 Pine St
Exit 73 Elm St
Exit 73 Ash St
Exit 73 Birch St
Exit 73 Oak St
Exit 73 Peconic Ave

3. Canoe Launch Park - has pervious gravel parking lot needing maintenance and potential to capture the water in bio-retention from road catch basins.

4. Open space that has opportunities for restoration and buffers.

Town of Riverhead
Peconic River/Rt. 25 Corridor

NYS BOA Step II
Nomination

FIGURE 4-1B
Green Infrastructure Opportunities Western Sites 2

Legend

- BOA Boundary
- Institutional & Fire District
- Suffolk County
- Utilities
- Town of Riverhead
- US Postal Service

0 100 200 300 400 500 Feet

Sources: ESRI Aerial
SC Real Property
Town of Riverhead

1 inch = 400 feet

5. Potential bio-retention within potential new re-development.

6. Runoff potentially intercepted and directed to a buffer in the woods, instead of direct drainage to river.

7. Potential to collect the water from the catch basins and roadway in open space around parking lot of park.

8. Opportunity for pervious pavement and/or bio-retention at park parking.

Site 7: Before and After at Park Entrance - curb to direct the water into raingarden.

Town of Riverhead
Peconic River/Rt. 25 Corridor

NYS BOA Step II Nomination

FIGURE 4-1C
Green Infrastructure Opportunities
Central Sites

Legend

- BOA Boundary
- Institutional & Fire District
- Suffolk County
- Utilities
- Town of Riverhead
- US Postal Service

0 100 200 300 400 500 Feet

Sources: ESRI Aerial
SC Real Property
Town of Riverhead

1 inch = 400 feet

9. Steep embankment - potential for a buffer from runoff along Main Street.

10. Historical Society - potential to capture water from the roof and along Court St. and Osborn Avenue.

11. Library - difficult site for infiltration practices, however it would make an interesting feature in the plazas.

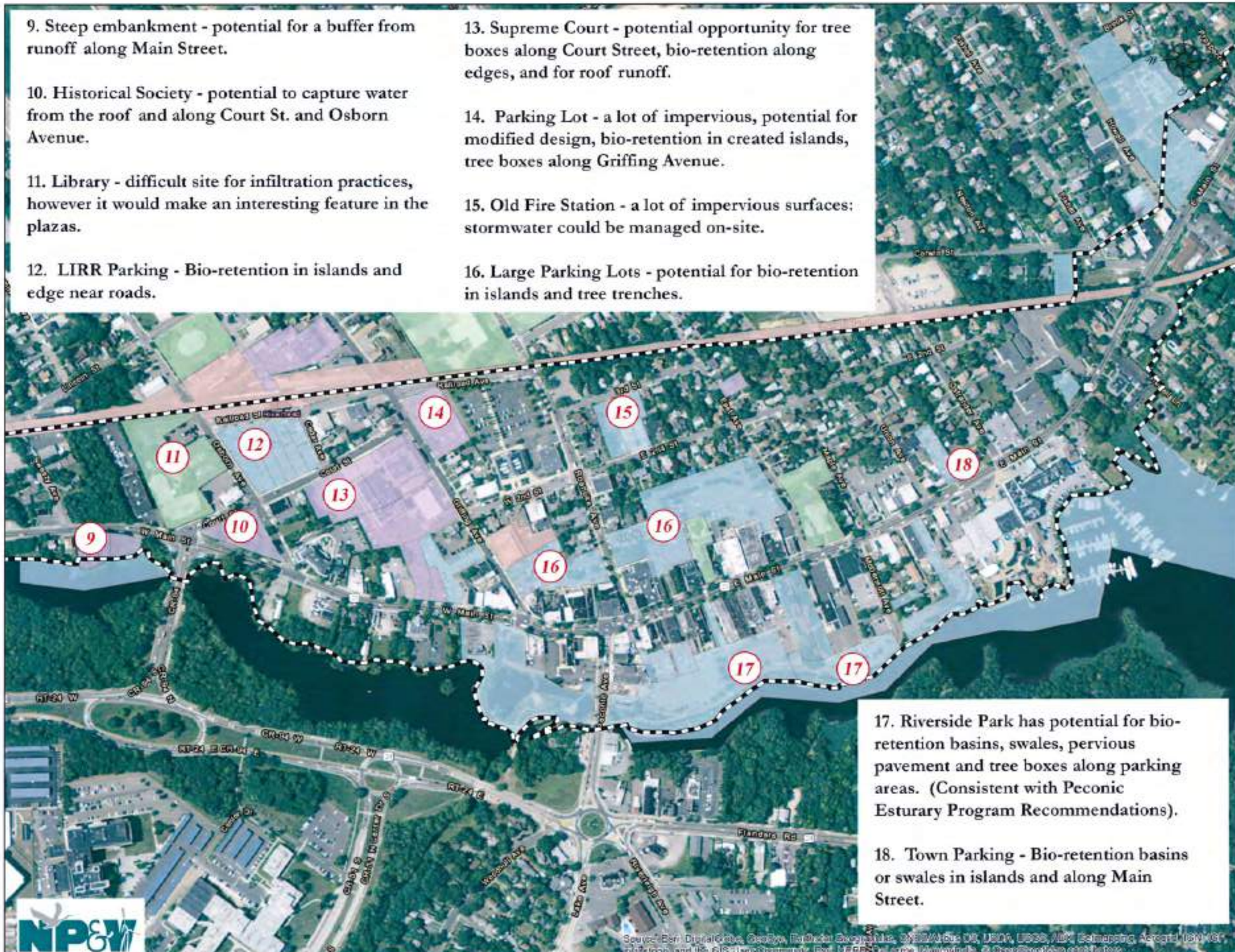
12. LIRR Parking - Bio-retention in islands and edge near roads.

13. Supreme Court - potential opportunity for tree boxes along Court Street, bio-retention along edges, and for roof runoff.

14. Parking Lot - a lot of impervious, potential for modified design, bio-retention in created islands, tree boxes along Griffing Avenue.

15. Old Fire Station - a lot of impervious surfaces: stormwater could be managed on-site.

16. Large Parking Lots - potential for bio-retention in islands and tree trenches.



17. Riverside Park has potential for bio-retention basins, swales, pervious pavement and tree boxes along parking areas. (Consistent with Peconic Esturary Program Recommendations).

18. Town Parking - Bio-retention basins or swales in islands and along Main Street.

Town of Riverhead
Peconic River/Rt. 25 Corridor

NYS BOA Step II
Nomination

FIGURE 4-1D
Green Infrastructure
Opportunities
Downtown Sites

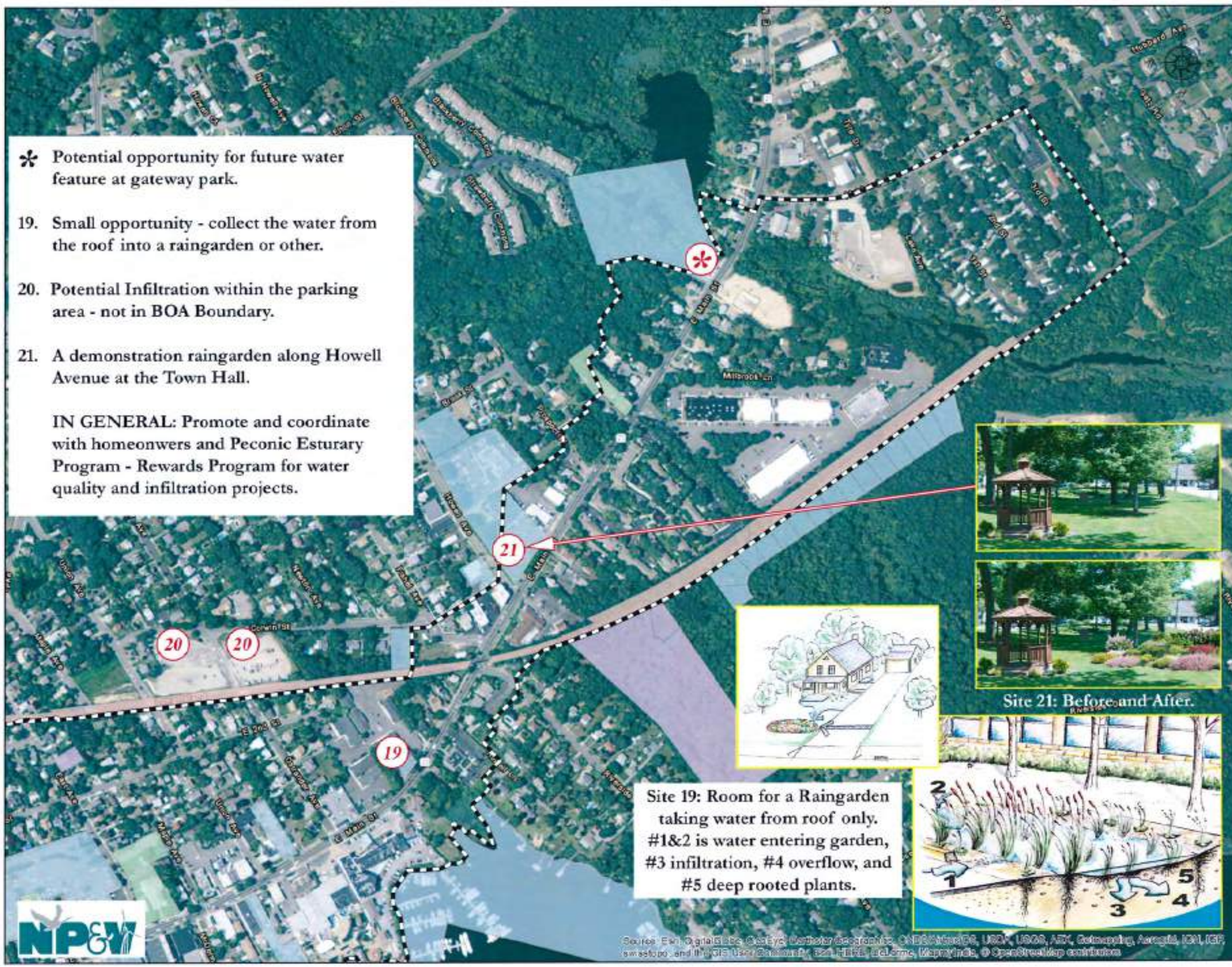
Legend

- BOA Boundary
- Institutional & Fire District
- Suffolk County
- Utilities
- Town of Riverhead
- US Postal Service

0 100 200 300 400 500 Feet

Sources: ESRI Aerial
SC Real Property
Town of Riverhead

1 inch = 400 feet



Town of Riverhead
Peconic River/Rt. 25 Corridor

NYS BOA Step II
Nomination

FIGURE 4-1E
Green Infrastructure Opportunities Eastern Sites

Legend

- BOA Boundary
- Institutional & Fire District
- Suffolk County
- Utilities
- Town of Riverhead
- US Postal Service

0 100 200 300 400 500 Feet

Sources: ESRI Aerial
SC Real Property
Town of Riverhead

1 inch = 400 feet

Town of Riverhead
Peconic River/Rt. 25 Corridor

NYS BOA Step II
Nomination

FIGURE 4-1F
Green Infrastructure
Opportunities
Details

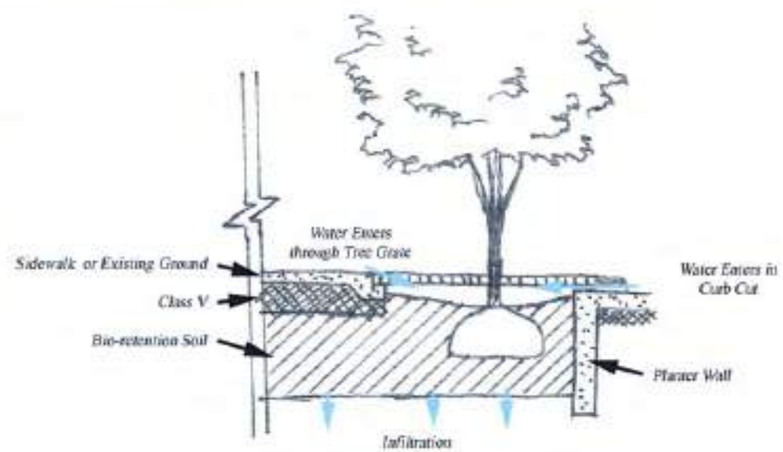
Site 12, 16, & 18: Parking Lot Island Raingarden: curb cut or wheel stop openings into shallow depression with raised outlet pipe for storage.

Site 17: Before and After - Raingarden along parking or in open spaces.

Site 17: Before and After - Raingarden in parking lot island.

Site 17: Existing pervious pavement near site, could be used at Sites 15 and 17.

Site 12, 13, 14, 16 & 17: Tree Trench or Tree Boxes installed along the roadways and edges of parking lots for infiltration, evapotransporation, interception, and treatment of stormwater in tree canopy or tree trench.



LIRR Station Parking: (See **Figure 4-1B**, Project #10) The parking lot property has about 10 percent of green space in the form of parking islands and boulevards. The entire lot has the potential to direct stormwater into bio-retention and tree boxes, with minor expansion into the parking required to treat the entire water quality volume (and loss of parking stalls if this project were implemented). To gain the necessary storage and reduce the amount of parking spaces lost, pervious pavements or underground storage in conjunction with the tree boxes could be implemented. The recommendations analyzed for pollutant load reduction assume use of tree. The trees also have the additional benefit of providing shade. The parking lot has an area of 2.11 acres. To capture the water quality volume in the parking area, 10,300 cubic feet of storage is needed.

Peconic River Mobile Homes LLC: (private property) has approximately 65 percent cover of impervious roof, driveway and roadways. The location of the property is directly on the Peconic River and has direct drainage to the river. Enough space is available to consider bio-retention and/or a buffer to the river on the property. The quality and aesthetics of the property would support a surface water quality improvement. The area of the property is 7.4 acres.

TABLE 4-2
ESTIMATE OF POLLUTANT LOAD ATTENUATION ACHIEVED THROUGH GREEN INFRASTRUCTURE

Location	**TN – Nitrogen** (lbs./yr.)	**TP – Phosphorous** (lbs./yr.)	**TSS – Total Suspended Solids** (lbs./yr.)	**Fecal Coliform** (billion/yr.)	**Runoff Volume** (acre-ft./yr.)
Riverfront Park	5.7	45	830	1,759	7
Former Fire Station	1.9	15	272	576	2
LIRR Station Parking	3.6	28	531	1,125	5
Peconic River Mobile Homes	14.4	72	1,438	2,675	11

The Peconic Estuary Program has a rewards program for water quality and infiltration projects that may benefit all the described projects. The Town could consider applying under the Green Innovation Grant Program and the Water Quality Improvement Project Programs from the New York State Consolidated Funding grants issued annually for implementation of these projects (those on Town owned land). The NYS Consolidated Funding requires a feasibility study for each project. The feasibility study would provide a design and provide more accurate load reductions based upon the plan for the site; however would be relatively inexpensive to prepare.

Groundwater Remediation

This Study supports the installation of permeable reactive barriers to protect groundwater quality. A Permeable Reactive Barrier (PRB) is a barrier built into the existing soil that is designed to intercept and remediate a contaminant to remediate groundwater prior to reaching a surface water body. The treatment zone may be created directly using reactive materials such as iron or indirectly using materials to stimulate secondary processes like carbon substrate and nutrients to enhance microbial activity. Since the early 1990's, over 200 PRB systems have been installed to treat groundwater contaminants and PRB's have become an important component

among the various technologies available to remediate groundwater. A PRB is a possible solution for reducing pollutant loads in groundwater prior to reaching the Peconic River. The PRB would include a long vertical trench dug perpendicular to the groundwater flow path. These barriers need to be created in long trenches to be most effective. The advantage of PRBs is that the system is unobtrusive once installed and has a long-term effectiveness with low operations and maintenance cost. Within that trench, a treatment media and degradation or removal process to the contaminants are placed, typically for Nitrogen, a mulch or organic/carbon substrate is placed to enhance denitrification process by the slowing of the groundwater causing anaerobic conditions and microbial activity. However iron fillings and other material can be added to gain additional remediation (i.e. iron fillings will remove Phosphorous).

Water Quality Education and Events

The community believes it is important to educate visitors and property owners as to the importance of protecting the Peconic River water quality including its tributaries and groundwater watershed areas. There are a number of examples of fun and interesting activities that could be pursued to meet this objective in a unique way that include the following:

- Participate in International Coastal Cleanup, held yearly in September, and develop a Spring Cleanup. Cleanups can be conducted along the banks of the Peconic River and tributary.
- Hold an art event "Trash to Treasure" featuring art made from materials collected during riverfront cleanups.
- Conduct a storm drain marking project on all drains in downtown Riverhead, and provide educational signage.
- Support the "Day in the Life of the Peconic River" initiative and incorporate stormwater education as an element of the program.
- Conduct a Rubber Duck Race, to provide education about stormwater flows and to raise funds for community organizations. http://www.westportsunriserotary.com/

In addition, the Peconic Estuary Program (PEP) is providing financial incentives to homeowners that live within the estuary to remove turf or pavement and add native vegetation areas and/or rain barrels to their properties. Homeowners can earn up to $500 to offset the expense of installing rain barrels, rain gardens, and native plant gardens. Water filtered through the soil within these gardens is dramatically cleaner when it enters the aquifer and storm drains. Rain barrels offer opportunities to intercept the rainwater that normally runs down paved surfaces and into storm drains to be reused for gardens and pots. It is recommended that the Town work with PEP to help promote this program. More information available at www.PeconicEstuary.org.

4.3 Transportation

4.3.1 Traffic

The following provides a summary of steps that would be required to achieve either of the traffic mitigation options described in Section 3.2.7. The list of improvements and steps for implementation are provided for both mitigation alternatives studied in the Traffic Impact Study if they were to be pursued by the Town of Riverhead. It is noted that if the projects are implemented by the DOT and SCDPW, additional steps may be required dependent upon the level of funding required. For large projects, improvements are reviewed by the local Metropolitan Planning Organization (for this area NYMTC[69]) for addition to the State's Transportation Improvement Program (TIP) prior to implementation.

Mitigation 1 – Peconic Avenue one-way northbound. Mitigation 1 consists of the following proposed improvements:

- Make Peconic Avenue a one-way road northbound with provision for a southbound emergency lane. By making Peconic Avenue one-way northbound, improvements in the operation of the intersection can be accomplished. However, it would require traffic to be rerouted to other intersections like West Main Street and Court Street, CR 94 at Nugent Street and CR 94 at CR 51, thereby necessitating further geometric improvements. Although not part of this study, this improvement will require further study and analysis of the intersections of CR 94 at Nugent Drive and CR94 at CR 51.

- Restripe the intersection of West Main Street at Peconic Avenue to provide two eastbound through lanes and two westbound through lanes. One of the westbound through lanes will drop just west of Griffing Avenue. The section of Main Street between Peconic Avenue and Roanoke Avenue will be restriped to provide two westbound through lanes and one eastbound through lane and one eastbound left turn lane.
- Re-stripe the southbound approach at the intersection of West Main Street and Court Street to provide an additional lane to accommodate the rerouted traffic from Main Street at Peconic Avenue/Roanoke Avenue. This improvement may require property acquisition of small areas to improve geometry.
- Signal timing/phasing adjustments at the following intersections:
    - Main Street at Peconic Avenue/Roanoke Avenue

[69] New York Metropolitan Transportation Council

  - West Main Street at Court Street/Nugent Drive
  - East Main Street at McDermott Avenue
  - West Main Street at Griffing Avenue
- Coordinate traffic signals on the Main Street corridor from Court Street to McDermott Avenue.

The implementation of Mitigation 1 would require the following steps if the Town of Riverhead pursues this option:

1. Obtain Highway Work Permits from the New York State Department of Transportation (NYSDOT) to construct the improvements proposed at the intersection of Main Street at Peconic Avenue/Roanoke Avenue and the intersection of West Main Street at Center Street/Nugent Drive.
2. Obtain Highway Work permits from Suffolk County Department of Public Works (SCDPW) for all work done on County Roads (Roanoke Avenue, Peconic Avenue and Nugent Drive).
3. As part of the Suffolk County Roundabout project, redesign the one lane five-leg roundabout to a two lane five-leg roundabout with one–way northbound on Peconic Avenue. (It is noted that the design of the roundabout has been engineered in such a way as to accommodate a one-way on Peconic alternative if this occurs prior to or following the County construction project).
4. Suffolk County DPW to study the intersection of CR 94 and Nugent Drive (the oval) and the circle at the intersection of CR 94 and CR 51 to identify any impacts that may be created by the Peconic Avenue one-way northbound and develop/construct improvements. It is noted that during interagency meetings with the DOT and SCDPW, the County agreed to study these intersections if the Town pursued this option.

In order to accomplish the above, the following steps need to be undertaken by the Town:

1. Prepare detailed conceptual plans of the proposed improvements at the intersections of Main Street at Peconic Avenue/Roanoke Avenue and West Main Street at Court Street for submission with the Traffic Impact Study to NYSDOT for the review and approval.
2. With the approval of the conceptual plans, the Town would be required to prepare a full design of the proposed improvements.
3. The NYSDOT will then issue highway work permits for the construction of the improvements.
4. Coordinate with Suffolk County on the study of the intersections of CR 94 at Nugent Drive and CR 94 at CR 51 and the incorporation of the Peconic Avenue one-way northbound in the Roundabout.
5. Obtain grant funding or earmark capital funds for design, possible acquisitions, and implementation of improvements (construction/signal timing).

The property on the southwest corner of Osborn Avenue and Court Street pictured here could be beneficial in the realignment of intersections in the area, if the Town pursues the one-way north

option for Peconic Avenue; this property may be necessary to accommodate an expanded Center Drive which would provide access across the river towards the County Center. This traffic option has not been evaluated and would require further design analysis. The property could be advantageous for other public purposes as well, including use as a community center or ancillary parking for the library and historic society on a portion of it. The property has been for sale for over 2 years.

Mitigation 2 - Realign Peconic Avenue and Roanoke Avenue to eliminate the offset intersections of West Main Street at Peconic Avenue and East Main Street at Roanoke Avenue. This mitigation will not require any major improvements at the intersection of West Main Street and Court Street and rerouting of traffic will not be required; however, this Mitigation would require acquisition of the properties located opposite the northern terminus of Peconic Avenue. In addition, as one of the buildings is a contributing structure of the Main Street Historic District; a review from the State Historic Preservation Office will be required (details below). Mitigation 2 consists of the following improvements:

- Realignment of Peconic Avenue and Roanoke Avenue and replacement of the existing traffic signal.
- Signal timing/phasing adjustments at the following intersections:
    - West Main Street at Court Street/Nugent Drive
    - East Main Street at McDermott Avenue
    - West Main Street at Griffing Avenue
- Coordination of traffic signals on the Main Street corridor from Court Street to McDermott Avenue.

The implementation of Mitigation 2 will require the following if the Town of Riverhead pursues implementation of this option:

1. Obtain Highway Work Permits from the New York State Department of Transportation (NYSDOT) to construct the improvements proposed at the intersection of Main Street at Peconic Avenue/Roanoke Avenue.
2. Obtain Highway Work permits from Suffolk County Department of Public Works (SCDPW) for all work done on County Roads (Roanoke Avenue and Peconic Avenue).

In order to accomplish the above, the following steps need to be undertaken by the Town:

1. Pursue grant funding/or allocate capital funds for acquisition, design, improvements.

2. Prepare detailed conceptual plans of the proposed improvements at the intersection of Main Street at Peconic Avenue/Roanoke Avenue for submission with the Traffic Impact Study to NYSDOT for the review and approval.
3. Identify properties to be included in new roadway area. Conduct a feasibility study regarding potential for land swap options to allow private development in area where Roanoke Avenue currently terminates and consider options for encouraging participation by land owners.
4. Prepare surveys and accomplish acquisition of properties opposite Peconic Avenue terminus.
5. With the approval of the conceptual plans by DOT, the Town would be required to prepare a full design of the proposed improvements and apply for permit.
6. The NYSDOT will then issue highway work permits for the construction of the improvements.

The Role of On-Demand Car Service

The use of technology such as "Uber" for on-demand car service and shared rides is expected to play a role in transportation planning in the future. At this time, these services are not prevalent in the Study Area at this time. As such services become more readily available, the Town and area businesses and organizations can play a role in promoting the use of these services. The following provides an overview of Uber and how the popularity of on-demand car service providers can provide transportation related benefits, including reduced vehicle trips and the environmental benefits associated with same, within the BOA and surrounding areas.

Uber[70] is a transportation network company that allows users to request a ride through a mobile app designed for smart phones. Customers use the mobile application (app) to request a ride at any time and in any location. Uber drivers use their own personal vehicles to provide transportation and information regarding the driver, type of car, and license plate number will be given to the rider prior to being picked up as a way to increase safety for customers. Uber attempts to make traveling easier by allowing customers to pay by linking credit card information to the mobile app so cash is not required.

Due to the extreme popularity of Uber, the company has expanded to include UberPOOL which allows customers to share the ride (and the cost of the ride) with other people headed to similar destinations. UberPOOL is frequently the cheapest Uber option and also is more environmentally friendly since it incorporates carpooling[71]. Additionally, Uber now offers UberXL and UberSUV to allow for larger groups to travel together. There has also been a focus on increasing accessibility by offering cars that accommodate wheelchairs or come equipped with car seats.

One of the biggest advantages of Uber is the flexibility it provides to customers. People who are unable to drive or do not own cars can utilize Uber to travel to their destinations at a relatively low cost. Uber cars can be utilized in locations where taxis are less common or where public transportation is lacking. Uber complements existing transit systems by providing transportation

[70] This section provides information about Uber, however, Lyft is another service popular in New York City. Lyft is not available on eastern Long Island.
[71] https://www.uber.com/ride/

between transportation centers and customers' final destinations. Uber has become especially popular for accessing downtown locations for people that wish to enjoy an evening/experience nightlife and consume alcoholic beverages without the worry about the logistics of safe transportation.

Uber also seeks to provide benefits to the cities and towns that utilize its services by drastically increasing efficiency. Uber utilizes its mobile app to match the supply of drivers with the demand of customers. Uber, unlike traditional taxis, do not spend as much time searching for customers or idling in designated locations waiting for customers[72]. This allows Uber to reduce the amount of congestion on the roads, time-wasted, and emissions emitted from idling or aimlessly driving.

Another way Uber can reduce traffic congestion is by promoting carpools, where an Uber driver can have overlapping customers rather than focusing on one ride at a time[73]. For example, if Customer 2 is located between Customer 1's pick up and drop-off location, the driver will simply pick up the second customer on the way to the first customer's destination. Additionally, as more people utilize Uber, the parking demand could decrease in downtown areas since people will not be using their own personal cars as frequently. Rather than driving themselves and searching for parking, people can utilize Uber to provide them with transportation directly to their destination without needing to worry about finding a place to park.

The presence of Uber within Riverhead has the opportunity to provide many benefits for the Town including congestion reduction, decrease in parking demand, reduction of emissions related to shared rides and reduction of cars circling the downtown in search of free parking space, and an increase in transportation options for Riverhead residents and visitors. Due to these numerous benefits, as services become more readily available it is recommended that the Town undertake initiatives to promote the use of Uber within Riverhead. These initiatives could include educating local businesses and residents about how Uber works. Additionally, the Town could spread awareness about Uber by posting flyers in popular destinations throughout Riverhead including restaurants and the train station, as well as posting information about Uber online and through social media sites.

[72] http://www.aei.org/publication/the-beauty-of-uber-and-why-it-represents-the-future-of-transportation-it-has-basically-eradicated-search-costs/
[73] http://venturebeat.com/2014/10/07/uber-shows-new-carpooling-feature-reduces-traffic-congestion-50-in-pilot-areas/

4.3.2 Parking

As empty buildings begin to fill and new development occurs (as envisioned under a future redevelopment scenario described in **Appendix I**), it was determined that an additional 1,197 parking spaces would be required to support additional demand.

In order to provide an additional 1,197 spaces, the construction of a parking garage located in the parking lot on the north side of East Main Street between Roanoke Avenue and East Avenue could be considered, in addition to a second parking structure associated with the train station block. As described above, the train station block concept plan envisioned a garage to support 882 stalls. If this garage were constructed, a smaller parking structure north of East Main Street in the Town parking area could accommodate the need under the alternative development scenario.

In general, a shorter parking garage (fewer stories) is less expensive than a taller garage structure, as the taller structure is "heavier" and requires more foundation support. Approximately 60-70 percent of the cost of the garage depends on the structural system, and whether it incorporates short spans or long spans. Longer spans are more costly, but allow greater efficiency in parking spaces as there are fewer columns to construct. Based on a parking space requiring 350 square feet, 315 parking spaces would require a garage size of 110,215 square feet. A 4 level parking structure accommodating approximately 315 spaces would require +/- 28,000 SF to accommodate the building's footprint, plus additional area for vehicle approach, a small office, elevator and stairways, and payment booth will require an additional 2,000 SF, for a total of 112,215 square feet.

The cost of construction of a parking garage varies; however, an estimate based upon published source for construction costs for the region is $78.50 per square foot[74]. Based upon this value, the current cost of a 315 parking structure would be $8.65 million. Clearly it would be best for the Town to utilize a variety of methods for achieving adequate parking for downtown Riverhead to reduce the number of parking stalls needed in a parking garage. The TOD Growth Plan includes improvement measures that could be considered to improve parking for the current and future conditions once redevelopment of the downtown occurs and parking demand increases. Other recommendations include attempting to limit on-street parking along West/East Main Street to short durations to allow motorists that are passing through to utilize the downtown establishments, and encouraging employees to park in municipal or private lots rather that utilize on-street parking. For events and entertainment venues, parking shuttles or public valets can be considered to encourage better utilization of parking and promote connectivity of off-street parking facilities. Shared parking, for example where evening parking occurs in lots for uses that operate between 9 AM and 5 PM, would also reduce the demand for parking.

Tools for parking management that are recommended include a new signage program to identify existing parking locations associated with various attractions as illustrated in the following graphic.

[74] Based upon RSMeans, Square Foot Costs, 2014 (35th Edition), page 137.

4.3.3 Pedestrian and Bicycle Plan

Adding bicycle lanes to the downtown may require widening roads or eliminating on-street parking which would not be practical or cost-effective. However, the area west of the downtown contains wide shoulders therefore the addition of bicycle lanes should be considered as this could encourage residents in the western portion of the Study Area to use bicycles as a way to travel throughout the area. There are several bicycle signs along several roads in the downtown, but there is a need to develop uniform bicycle signage in order to convey clearly the locations of bicycle routes. The signs should comply with NYSDOT standards. Some signs that contain only text should be upgraded to also include the bicycle symbol to increase awareness of bicycle paths. New development projects create opportunities for providing bicycle accommodations such as bicycle racks and lockers at new apartments, stores, and attractions. Adding secure bike storage should encourage more people to travel via bicycle. Bicycle accommodations should be continuously explored to gradually build up cycling features in the surrounding area which will promote and encourage cycling and hopefully have a positive impact on intersection delay and Level of Service by lowering motor vehicle usage/trips.

NP&V has developed recommendations for augmenting the on-street bicycle routes with bike paths on public property and on private lands where redevelopment could incorporate easements in the future. **Figure 3-12C** provides potential routes to provide additional options for consideration in planning off street bicycle routes/paths. The Town may wish to consider implementing a TDR program for property owners who provide easements on their waterfront properties to allow public access and a continuous greenbelt trail. In addition, as part of the site plan review process for properties fronting the river, design should be required to provide a conservation easement along the river for future public access trail.

4.4 Cultural, Historic and Recreational Resources

The Town is progressive in its protection of historic resources. As noted, BOA funding was utilized to assist the Town LPC in preparation of an application for a new National Register District for the residential area centering around 2nd Street. The new district will provide financial benefits to homeowners within the district to restore contributing structures and provide numerous benefits for the community with respect to historic preservation, enhanced aesthetics and improved community character. A copy of the inventory prepared by HWJ is provided in **Appendix C**. Continued support and interagency coordination between the Town LPC and State Historic Preservation Office is recommended to establish the new district.

During the community participation process, the importance of protecting and expanding access to important cultural and recreational assets was stressed. The recommendations developed through this process and/or included in prior planning documents are set forth below:

- Work towards a continuous Greenway along the river (supported in the Comprehensive Plan, Open Space Plan, Peconic Estuary Plan) to create a continuous walkway and bike path.
- Expand visual access to the river; identifying and acquiring key viewshed properties from which the river is visible. Create code requirements to protect scenic views.
- Create a conservation easement along the river for a continuous trail for public access and consider providing tax relief for access across private property. Incorporate conditions in site plan approvals for properties fronting the river to provide a conservation easement as a condition of approval.
- Use density bonus for development in the downtown - support variance applications to DEC with purchase of properties on south side - need to be able to show benefit to the river. (If Community River designation is not possible)
- Coordinate with Southampton on use of former Gotlieb property for passive/active riverfront park - with pedestrian bridge or water taxi as connection.

- Develop a Blueway Trail for the Peconic River, and Peconic Bay area to incorporate an inventory of historic and cultural assets along the Trail and recommendations for trailhead improvements. These improvements should include providing secure storage for kayaks, so that paddlers can explore downtown resources.

4.5 Placemaking

Placemaking is nothing new in the realm of planning - it is actually a term that originated in the 1960s that centers on wellbeing - quality of life, health, happiness, and creating places of beauty, safety, comfort and an environment where people can share positive experiences in public spaces.

People are drawn to downtowns for their uniqueness - downtowns can provide momentous experiences where suburban vehicle centric corridors cannot. While the suburban retail corridors such as exists on Route 58 fulfills a need in modern life - providing day to day essentials, Riverhead's downtown provides the atmosphere and meaningful places that people desire. A riverfront walk, a community garden, a local gallery, family owned cafés, restaurants and unique shops.

New life has been breathed into downtown Riverhead in recent years, thanks to the support of the Town of Riverhead Town Board, Community Development Agency, and all of the supporting departments, as well as the dedication of numerous private individuals and organizations. One can point to the relatively recent success stories which are at the root of Riverhead's renaissance - the Long Island Aquarium, the Hyatt, East Ends Arts gallery and school, Suffolk Community College Culinary Arts, the reopening of the Suffolk Theater and numerous new shops, unique restaurants, and craft breweries. The Town's dedication to placemaking is also evident in the investments made in its public spaces - in the Peconic Riverfront Park, Grangebel Park and community garden.

The Town of Riverhead's commitment to the importance of placemaking and community events is evident in its interest in bringing WaterFire to Riverhead; and towards this end the Town Board authorized the expenditure of BOA funds for the preparation of a Creative Placemaking Plan by Barnaby Evans, the creator of WaterFire, to draw upon his experience for hosting large community events in downtown Riverhead. This Creative Placemaking Plan is provided to the Town as a separate document.

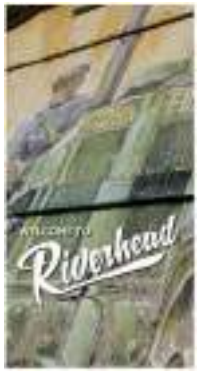
This section of the Nomination brings together findings and recommendations regarding many of the topics which are less about infrastructure and the built environment - and more about designing on a human scale, the features that bring people together - art, music, activities, family fun, beauty, and creating great public spaces. **Table 4-3** summarizes the ideas and recommendations that were developed thorough the project term and the sections that follow expand upon some of the key recommendations.

TABLE 4-3
PLACEMAKING GOALS AND RECOMMENDATIONS

Goal	Recommendations
Improve Riverhead's Image	Create a unique identity for Riverhead
	Create and name downtown districts, breakdown into areas (similar to NYC) and use districts to promote Riverhead as a place where things are happening
	Coordinated rebranding and implement a marketing strategy (see section below)
	Fill vacant stores (for chronically vacant buildings require improvements in the appearance of vacancies in downtown by regulating the way vacant buildings look – such as requiring attractive window displays, that they be kept neat in appearance, clean)
Expand Tourism to Riverhead	Create new attractions that are inexpensive or free for visitors to use (synthetic ice rink, water spray fountain)
	Encourage tourism related enterprises such as: • New museums • Theme based shuttle/tour bus • Bicycle rentals and bike loops/canoe/kayak rentals • Charter sailboat business to provide short boat rides on the Peconic River to the 105 bridge (similar to Breck Marshall Catboat at Mystic, shown below)
	Work towards making downtown Riverhead a daytime family destination that is easily accessible and has many activities that can be enjoyed in a single visit and where people will want to return again and again.
	Downtown Programming (and continued promotion) should be established so that something going on every weekend if possible.
	Stage special events focused on the river to supplement the existing annual events such as the cardboard boat race. Potential ideas: include WaterFire; oyster/clam/scallop festivals, food caravans of local restaurants, music

Goal	Recommendations
	festivals, history festivals, wine tasting, beer tasting, farmers markets, seasonal festivals [spring, summer, fall, winter]
	Promote Riverhead history wherever possible (e.g., public photo displays, murals, historic plaques, brochures, events)
	Make it easier for boaters to visit and stay for a few hours. Consider a meter system – or pay by phone by calling the attendant at Stotsky Park or a smartphone app to obtain a permit.
	Marketing efforts on a regional level (with messages to weekenders, day trippers from all of Suffolk County): • Connect downtown activities with Polish Town activities • Link downtown activities with activities at Middle Node, Tanger Outlet Area and Splish-Splash • Re-activate trolley bus from Tanger once there is sufficient demand • Enhance connection to East End attractions (wine tasting, antiques, pumpkin picking, veggie and fruit farms, beaches, water sports, golf, etc.)
	Create a website highlighting tourism related businesses and services in the Study Area.
	Create a guide for distribution to the area hotels and visitor centers highlighting tourism related businesses and services in the Study Area
	Promote Riverhead through existing tourism sites.
Signage	Improve signage. See discussion below

4.5.1 Marketing



Overcoming obstacles to redevelopment/revitalization is the main theme of the BOA program, and it is believed that a strong brand will be an important first step in marketing for the Riverhead downtown and gateway areas that encompass the BOA Study Area. The Town of Riverhead selected a local marketing firm, Graphic Image Group, to develop a marketing approach for the Riverhead BOA Project with an emphasis on development of the brand.

Through this process, a logo was developed which can be used in many ways - in marketing and promotional materials, in signage and on a website. The logo that emerged was intended to capture a retro feel - to remind people of Riverhead's past with a new fresh and crisp feel. The additional tasks performed by GIG included the design of a website landing page - which incorporates high quality professional photography. The website has been designed to inspire people to visit the area and incorporates simple administrative features to allow replacement of files (to make it simple for the Town to update pages on occasion). The main page has rotating images that reflect the best features in Riverhead and were chosen for their ability to spark an emotional response[75]. The target audience for the webpage is for visitors to the area, so that they may

[75] See www.WelcometoRiverhead.org

gain familiarity and be inspired to visit all the area has to offer. The additional pages of the site include links to a customized web-based map of attractions in the downtown area and a photo gallery which can be updated by the Town with new photos.

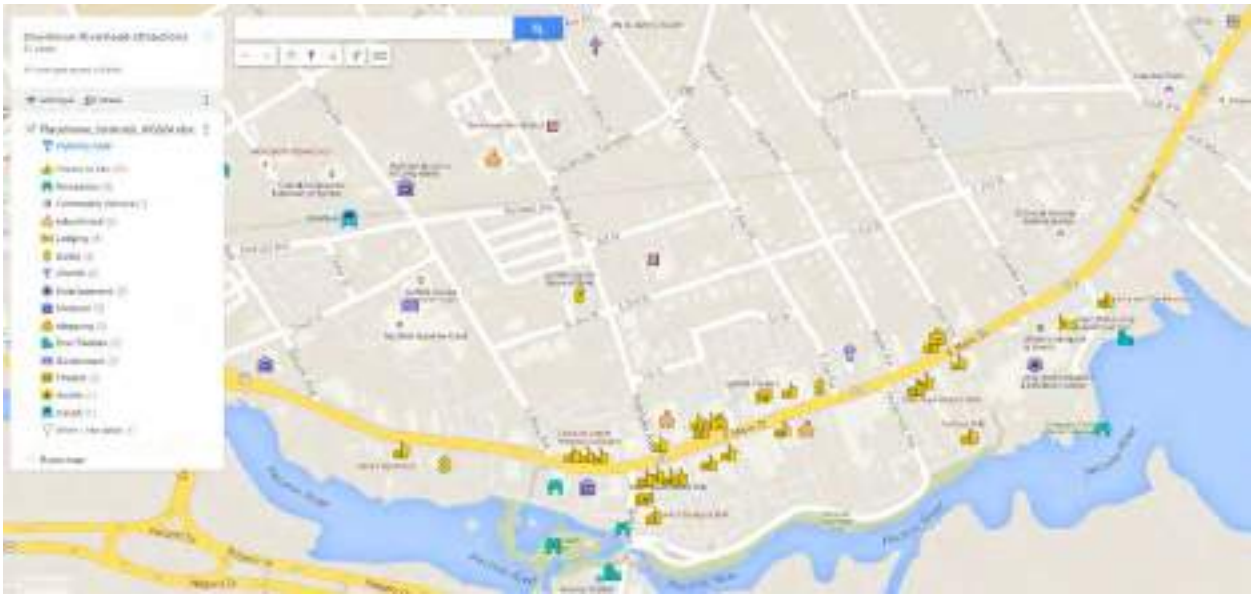
The role of marketing should be centralized and there should be at least one dedicated staff person for this purpose - whether employed through the Town of Riverhead, local Chamber, or BID. This role would ideally include coordination with organizations and news outlets, managing social media, programing for year-round activities, development of promotional materials for Town sponsored events, a contact for major event organizers (such as musicians) and periodically developing new campaigns - and new slogans to use in promoting events. Marketing slogans need to be fresh and updated - whereas a logo and brand needs to transcend time and thus, the logo that was developed uses a retro font that can be used across numerous channels. A sample slogan here reminds visitors that they can shop for all their needs on Route 58, but for a unique experience, downtown is the place to be!

Riverhead has it all!

VISIT US ON ROUTE 58 FOR ESSENTIALS AND DOWNTOWN FOR THE EXPERIENCE!

The following pages provide images from the new website's landing page, gallery and customized map.

Sample of homepage from www.WelcometoRiverhead.org



www.WelcometoRiverhead.org website map page

www.WelcometoRiverhead.org photo gallery sample page

4.5.2 Signage

One of the recipes for success includes helping visitors find their way - and learn about the attractions and amenities that are nearby. Simply put, a system of wayfinding signs is a great method of showing off everything the Town has to offer and a relatively inexpensive investment which provides enormous benefit by providing basic information about the location of attractions. A system of wayfinding signage can be funded by grants, incorporated as a community benefit for development projects, and supplemented by the local BID. The implementation of a wayfinding system benefits a community by clearly illustrating everything the community has to offer, enhancing the civic brand, and increasing civic engagement. Wayfinding signs also have the benefit of directing traffic in a manner which can strategically guide visitors to and from a destination which optimizes routes which can handle increases in traffic volumes.

It is important that wayfinding signs are properly designed and strategically planned (for content and placement). Guidelines for strategic planning of a wayfinding system include keeping the message simple - clear and concise and consistent. Show only the information that is relevant and necessary. For example, if the intent is to communicate where parking is located for a specific attraction, the sign should indicate only the name of the attraction and "parking" with an arrow (as used on the sign here in the Village of Patchogue). It is best to leave no room for interpretation. Wayfinding signs have the ability to reduce car dependence by clearly depicting distances and walking times between nearby attractions. Often, people rely on cars out of habit but proper signage can help people realize the close proximity of attractions and promote walking or bicycles as a means of transportation. (For example, a sign such as the one featured in the photo at the right[76] that reads "It's a 5 minute walk to five restaurants" placed near the court building exits would promote walking downtown).

Within Riverhead, there is a significant need for an improved wayfinding system for pedestrians, bicyclists and motorists. Input received during BOA focus groups, Steering Committee meetings, and workshops addressed the need for and importance of creating a more wayfinding system in order to both provide directions and promote Riverhead as a destination.

Wayfinding signs in and around downtown Riverhead can be used to direct people to the different locations, courts, lodging, shopping, arts venues, and popular attractions such as the Long Island Aquarium. In addition, signs can provide information regarding the location of the historic districts and important buildings - as well as to provide guidance for finding the nearest parking area. Recommendations for wayfinding signage for parking were discussed in the Parking Section (above) as included in the TOD Growth Plan (graphic provided in the previous section).

[76] Source: American Planning Association, Planning Magazine, July 2015

Finally, signage would be extremely beneficial along Route 58 and on the Long Island Expressway, to alert visitors of the presence of a historic Main Street shopping area just a few miles away. Recommendations for sign locations indicating the approximate distance to downtown Riverhead are identified on **Plate 1**.

4.5.3 Need for Focal Elements

An opportunity exists to create focal points at the gateways and other strategic locations to downtown to enhance the community's unique sense of place. Typical focal points include water fountains, statues, "art" elements, public spaces, monuments, or other such contributions to the cultural fabric of the community.

Scoot train. The 84 lumber site offers a unique opportunity for a tourism based train that serves as both transportation to the downtown from the western subarea and an attraction. The orange blossom cannonball train in central Florida[77] is a case study that can be reviewed for inspiration. The restored steam train pictured here is mainly a tourist attraction and provides special seasonal theme rides, such as the trip to the North Pole in late November thru December (where elves sing to passengers and everyone is served hot cocoa). The train rides are generally an hour and a half and in addition to the ride, guests are served wine and cheese and there is entertainment onboard - and thus, unless this scoot train idea is implemented and travels further east than the train station, the programming will be limited. However, the Orange Blossom Cannonball Express provides inspiration for new programming for the Town which can build upon the scoot train concept. Other communities utilize former rail lines to accomplish the same objective, including the Catskill Mountain Railroad which offers a Polar Express event during the winter holiday season at its two venues – one in the City of Kingston, and the other in the Catskill Reservoir region along Route 28.

NP&V Photos, February 2015

[77] http://www.orangeblossomcannonball.com/

4.6 Funding

This section provides an overview of the potential federal, New York State, and Suffolk County funding sources for the Town of Riverhead BOA project area. **Table 4-4** is a list of potential funding sources that private developers and other businesses can apply for. **Table 4-5** is a list of potential municipal grants that can support infrastructure improvements and be targeted in the areas of the BOA sites. Each table contains a description of the agency that administers the funding, a description of the funding program, eligible activities, funding parameters, a link to the funding agency's website and agency contact information.

The following provides additional information specific to funding for flood related mitigation (specifically for waterfront parking and Peconic Avenue flooding mitigation projects).

FEMA Funding: In order to apply for and receive funding under various FEMA mitigation programs, a municipality must be covered by a FEMA-approved All-Hazard Mitigation Plan. The Town of Riverhead is currently a part of the FEMA approved "Suffolk County Multi-Jurisdictional Hazard Mitigation Plan". The plan was updated in 2014 and includes a history, description of, and ranking of hazards that affect the County. Various mitigation actions and a list of potential projects for each of the participating municipalities are included. Many potential projects were added from the 2009 original plan based on the subsequent damage and need for mitigation as a result of Hurricane Irene and Superstorm Sandy. In addition, municipalities provided more information about potential project because FEMA is now requiring that they will only fund projects identified in an approved plan.

Flooding mitigation for the waterfront parking lot appears to be an eligible activity and covered under the above referenced plan under Section 9-29, Project R-13. The mitigation of the parking lots will protect the businesses that are being flooded during major storm events, as well as the flooding and damage of other public properties in the vicinity.

The eligible FEMA funding sources are as follows:

- FEMA – Hazard Mitigation Grant Program
- FEMA - Flood Mitigation Assistance Program
- FEMA - Pre-Disaster Mitigation Grant Program
- FEMA - Severe Repetitive Loss Grant Program

All the above programs are funded at 75% federal and 25% local shares. Funding for these programs are on an annual basis except for the Hazard Mitigation Grant program whose funds are generated as a percentage of the documented damage in a presidentially declared disaster. Under FEMA mitigation grant programs, projects must be cost efficient and have a Benefit-Cost ratio greater than 1.0. In order to achieve this, during the grant application period, municipalities must be able to document damage history. Examples of damage documentation for the parking lots could include: cost of repairing parking lots/capital improvements as a result of flood damage; damage to private businesses as a result of the flooding, and loss of business (in dollars) as a result of flood damage and flooded parking lots; cost of emergency operations (Town, Fire, Police) as a result of the flooding. The municipality would apply for funding through the New York State Department of Homeland Security and Emergency Services and staff will assist the municipality with the grant application process by computing the benefit-cost ratio based on information that the municipality provides.

The Town may want to do an engineering feasibility study to determine if elevation of the parking lot will provide the desired mitigation. The basis of the study could be used as a proof of potential success of the project in a future FEMA grant application. It may be possible to use CDBG funding to finance the study.

New York State Multi-Modal Program: This source of funds could also be used to rehabilitate the parking lots. The Town of Riverhead would need to contact their New York State representatives and provide project details and cost estimates.

For mitigation related to Peconic Avenue flooding, it is expected that the project could be eligible for FEMA funds as noted above. In addition, the following sources are potentially available for mitigation projects:

- FHWA/NYMPO/NYS DOT (Project is eligible as the road is listed on the Federal Highway System Maps) - Surface Transportation Program: road reconstruction and drainage. Scoping and design: 80% federal/20% local. Construction: 80% federal/15% State/5% local. Project must be listed in Nassau-Suffolk Transportation Improvement Plan (TIP). There should be a call for new projects in 2016. Town should contact the Suffolk County Department of Public Works about the possibility of getting the project listed in the TIP.
- CHIPS Funding - these are funds that the municipality receives by formula on an annual basis. Road reconstruction and drainage projects are eligible.

Table 4-4
Potential BOA Funding Sources
Funding for Businesses

#	Funding Agency	Program	Eligible Activities	Funding Amounts	Website	Contact	Comments
1	New York State Department of Environmental Conservation/New York State Department of Taxation & Finance	New York State Brownfield Clean Up Program	1. Site Preparation and On-Site Groundwater Remediation Credits. 2. Tangible Property Credit Component (Redevelopment Credit)	Tax credit varies depending on use, level of clean-up, and if project is in a BOA or Economic Development Zone http://www.empire.state.ny.us/BusinessPrograms/BrownfieldCleanup.html	http://www.dec.ny.gov/chemical/8450.html	Walter Parish, PE, NYS DEC, 631-444-0241, wjparish@gw.dec.state.ny.us	Refer to the following website which describes the tax credits in detail: http://www.dec.ny.gov/chemical/45734.html#post_June
2	Riverhead Industrial Development Agency	Taxes & Incentives	Relocating or Starting a Business in the Town of Riverhead	Sales tax exemptions, real property tax abatements, mortgage recording tax exemption. Tax-exempt and/or taxable industrial development bonds. Assists business owners and developers in locating suitable sites for development.	http://www.riverheadida.org	Tracy Stark-James, 631-369-5129, director@riverheadida.org	
3	Empire State Development Corporation	Taxes & Incentives	Relocating, Starting or Expanding a Business in New York State	1.Investment Tax Credit, 2. Lower Corporate Tax for Manufacturers, 3.Real Property Tax Abatement, 4. Research & Development Tax Credit, 5. Sales Tax Exemptions, 6	http://www.empire.state.ny.us/BusinessPrograms/Taxes_Incentives.html	Barry Greenspan, ESDC Long Island Region, 631-435-0717	It's important to coordinate an incentive package between the Town IDA and NYS ESDC
4	Empire State Development Corporation	Excelsior Jobs Program	Job creation, Job Retention and Significant Capital Investment (On-going enrollment)	Tax and Wage credits based on new jobs created and include the following: 6.85% wage credit per new job created, 2% Investment Tax Credit, 3% Research & Development Tax Credit, and Real Property Tax credit	http://www.empire.state.ny.us/BusinessPrograms/Data/Excelsior/06272013_ExcelsiorJobsProgramOverview.pdf	Barry Greenspan, ESDC Long Island Region, 631-435-0717	Eligibility determination based on number of job created in each eligible field per the following: http://www.empire.state.ny.us/BusinessPrograms/Excelsior.html
5	Empire State Development Corporation	Empire State Development Grant Funds	Projects must create jobs. and application is available competitively thru the CFA and include the following:1. Business Investment, 2. Infrastructure Investment, & 3. Economic Growth Investment.	20% grant funding/80% other investment for the following: Acquisition or leasing of land, buildings, machinery and/or equipment; Acquisition of existing business and/or assets; Demolition and environmental remediation; New construction, renovation or leasehold improvements; Acquisition of furniture and fixtures; Soft costs of up to twenty-five percent (25%) of total project costs; and Planning and feasibility studies related to a capital project. Public projects that support development that lead to job creation such as sewers, STP's, drinking water system upgrades, etc.	http://regionalcouncils.ny.gov/sites/default/files/documents/2013/new-available_resources_2013.pdf	Barry Greenspan, ESDC Long Island Region, 631-435-0717	Consolidated Funding Application period is available once a year usually after April 1.
6	Empire State Development Corporation	New York State Business Incubator and Innovation Hot Spot Support Program	Projects must create jobs. and application is available competitively thru the CFA to become a designated Incubator and/or Innovation Hot Spot for start-up companies	2:1 funding share: Incubators: $125,000 annually for operations. Hot Spots: 250,000 annually. Hot Spots businesses must be affiliated with colleges, universities and independent research institutions and the incubators within the hot spots are also eligible for significant State income and sales tax benefits for 5 years.	http://regionalcouncils.ny.gov/sites/default/files/documents/2013/new-available_resources_2013.pdf	Barry Greenspan, ESDC Long Island Region, 631-435-0717	Consolidated Funding Application period is available once a year usually after April 1.
7	Empire State Development Corporation	ESD Strategic Planning and Feasibility Studies	For economic and employment opportunities and stimulating development of communities by developing 1. Strategic Development Plans, 2.studies for Site or Facility Assessment Planning. Eligible Applicants thru the CFA include: Municipalities, Local Development Corporations, & Not-For Profit Economic Development Organizations.	$100,000 maximum grants, 50% match and at least 10% cash equity. Studies, surveys or reports, and feasibility studies and preliminary planning studies to assess a particular site or sites or facility or facilities for any economic development purpose other than residential, though mixed-use facilities with a residential component are allowed.	http://regionalcouncils.ny.gov/sites/default/files/documents/2013/new-available_resources_2013.pdf	Barry Greenspan, ESDC Long Island Region, 631-435-0717	Consolidated Funding Application period is available once a year usually after April 1.
8	Empire State Development Corporation	Job Development Authority (JDA) Direct Loan Program	Loans for the growth of manufacturing industry and other businesses. Cost of acquiring and renovating existing buildings or constructing new buildings, and the purchase of machinery and equipment.	Loans for 40% of the total project cost and 60% in an economically distressed area.	http://www.esd.ny.gov/BusinessPrograms/JDADirectLoanProgram.html	Barry Greenspan, ESDC Long Island Region, 631-435-0717	Project Financing Scenario: 50% Bank Loans, 40% JDL Loan, 10% Borrower Equity
9	Empire State Development Corporation	Manufacturing Assistance Program (MAP)	The program assists NYS manufacturers invest in capital projects that significantly improve production, productivity and competitiveness	Maximum Award: $1million. Minimum requirements: $1 million in capital investment machinery, quantified improvements over baseline operation of 20% or more, and retention of at least 85% of workforce for five years.	http://www.empire.state.ny.us/BusinessPrograms/MAP.html	Barry Greenspan, ESDC Long Island Region, 631-435-0717	Discuss project with ESD contacts and then complete application. Applications are accepted on an on-going basis.
10	New York Power Authority(NYPA)))	Re-Charge New York	Receive low cost power thru PSEG transmission lines. Should be companies that are manufacturing based that have high electricity requirements.	Reduced electric bills, possibly by 20% depending on the use for businesses that want to expand or relocate in NYS.	http://www.nypa.gov/rechargeny/	1-888-562-7697 or recharge.newyork@nypa.gov	Application available thru the CFA.
11	New York Business Development Corporation	Small Business Administration Section 504 Business Loans	Low Interest federal government Small Business Administration Loans	Loans for small and medium sized businesses - plant, equipment and working capital	http://www.nybdc.com/	Jim Goldrick, 534 Broad hollow Road, Suite 430, Melville, New York, 11743 516-845-2700	
12	New York State Department of Labor	Workforce Development	Employee Training (for both existing employees and unemployed and On-the-Job Training	Maximum cost per trainee is $5,000 maximum cost of On-the-Job Training is 50% of the employees salary for a period not grater than 6 months. Maximum grant award per private company is $100,000.	http://labor.ny.gov/cfa/index.shtm	Andrew Gehr, NYS DOL - 518-457-0361	Application available thru the CFA
13	NYS Environmental Facilities Corporation	Green Innovation Grant Program	Permeable Paving, Bioretention (Rain Gardens, Bio-swales), Green Roofs/Green Walls, Stormwater Street Trees, Downspout Disconnection, Stormwater Harvesting and Reuse.	90% federal EPA funding/10% local share	http://www.nysefc.org/	Suzanna Randall, Green Innovation Coordinator, NYS EFC, 518-402-7461	Application available thru the CFA and must include a feasibility study. Municipalities and non-profits are also eligible for funding.

Table 4-4
Potential BOA Funding Sources
Funding for Businesses

#	Funding Agency	Program	Eligible Activities	Funding Amounts	Website	Contact	Comments
14	Suffolk County Department of Labor	WIA	Employee Training, On-the-Job Training, Job Placement	Funding varies	https://labor.ny.gov/workforcenypartners/lwia/localboardssuffolk.shtm	Jennifer Stavola, 631-853-6958	Employers should contact the department in order to obtain on-the-job information and available trained clients for job placement
15	IRS	Tax Credits	For Brownfield Remediation and Development	Program was created by Tax Relief Act of 1997 but expired in 2011 and has not been renewed	http://www.epa.gov/brownfields/tax/ti_faq.htm#i		Will provide future information as to the status of any new legislation.
16	Long Island Development Corporation	Financial Assistance to Businesses	1. Fast Track - Provides incentives to lenders to make small business loans up to $100,000 with an SBA. 2. LEI. Targeted Industries Revolving Loan Program - Low fixed rates for targeted industries, including defense diversification, fisheries, biomedical, pharmaceutical, software development and high-end electronics. 3. Micro Loan revolving loans for women owned businesses - provides short-term loans ranging from $2,000 to $25,000 for working capital needs, purchase of equipment or inventory for start-up and expanding businesses. 4. Capital Asset financing	Both short and long term loans available	http://www.lidc.org/	1-866-433-5432, info@lidc.org	
17	Community Development Corporation	Financial Assistance to businesses and potential home buyers	1. Residential lending. Rental Housing Assistance, 3. Affordable Workforce Housing, 4. Small Business Training, 5. Business Assistance Program, 6. Home Energy Incentives, 7. Home Improvement Program, 8. Weatherization Assistance Program, 8 Sandy Housing Recovery Program	Assistance varies with each program	http://www.cdcli.org/	631-471-1215, info@cdcli.org	
18	Suffolk County Economic Development Corporation Labor (DECK)	Financial Assistance for Not-For-Profits	1. Tax-exempt Bonds. 2. Taxable Bonds 3. Refundable Bonds 4. Exemption from Mortgage Recording Tax	Agency does not issue it's own bonds, They coordinate potential lenders with applicants	http://www.suffolkcountyny.gov/Departments/EconomicDevelopmentAndPlanning.aspx	Tony Catapano, 631-853-4669, sedc@suffolkcounty.gov	
19	Suffolk County Industrial Development Agency	Financial Assistance to Businesses	1. Property Tax reduction, Freeze or Abatement (5, 10, 12, 15 and 20 years in length). 2. Sales Tax exemption on project materials and new equipment. 3. Exemption of Mortgage Recording Tax) 4. Taxable or Tax-exempt Bond Financing or Lease Transaction	Assistance varies with each applicant. Note: Rental Housing is an eligible activity	http://www.suffolkcountyny.gov/Departments/EconomicDevelopmentAndPlanning.aspx	Anthony N. Manetta, 631-853-4802, info@suffolkida.org	

Table 4-5
Potential BOA Funding Sources
Governmental Projects that Support Business Development

#	Funding Agency	Program	Eligible Activities	Funding Amounts	Website	Contact	Comments
1	Town of Riverhead	Community Development Block Grant Program	Commercial Improvements, business development incentives, Improvements to Town/County owned land that would support business development, streetscape improvements	Varies depending on budget and federal allocation	http://www.townofriverheadny.gov/pView.aspx?id=2474&catid=118&uSB=2474	Chris Kempner, 631-727-3200, kempner@townofriverhead.gov	
2	U.S. EPA	Brownfields Assessment & Clean-Up Program	Brownfield Assessments, Setting up a Revolving Loan Fund, and direct clean-up on sites owned by governmental or quasi-governmental agencies. Funding is for petroleum or other hazardous substances only.	80/20 funding shares. The Revolving Loan Fund can offer private entities low or no interest loans.	http://www.epa.gov/brownfields/	Lya Theodoratos, US EPA Region II, 212-637-3260	
3	FHWA/New York Metropolitan Planning Organization	Map-21 Transportation Alternatives	Construction, planning & design of on-road and off-road trail facilities for pedestrians, bicyclists, and other non-motorized forms of transportation, 2.Infrastructure related projects regarding Safe-Routes for non-drivers, 3. Conversion and use of abandoned railroad corridors for trails for pedestrians, bicyclists, or other non-motorized transportation users, 4. Construction of turnouts, overlooks and viewing areas, 5. Community Improvement Activities: removal of outdoor advertising, historic preservation and historic transportation facilities, vegetation management practices in transportation rights-of-way to improve roadway safety, prevent invasive species and provide erosion control, 6. Any environmental mitigation activity, including prevention and pollution abatement activities and mitigation to address stormwater management, water pollution prevention related to highway construction or runoff or reduce vehicle-caused wildlife mortality or to restore and maintain connectivity among terrestrial or aquatic habitats, 7. Safe Routes to School Program, 8. Recreational Trails Program	80% federal/20% local	http://www.nymtc.org/	Howie Mann - 631-952-6115	
4	New York State Office of Community Renewal	Main Street New York	Private Building Renovations and Commensurate Public Improvements. Must be in an economically distressed area and have a mixed use component in downtown areas	75%/25% funding shares for projects between 50K and 200K	http://www.nyshcr.org/Programs/NYMainStreet/	Crystal Loffler, Program Director - 518-474-2057	
5	Empire State Development Corporation	Technical Assistance and Training Grants - Opportunity Agenda Projects	1. Technical Assistance to Local Businesses, and 2. Training and Career Development Opportunities to Local Workers. Eligible Applicants: Not-for-profit Corporations Community Development Organizations Economic Development Organizations Local Development Corporations	Up to $100,000. Applicant must finance at least 10% cash equity	http://regionalcouncils.ny.gov/sites/default/files/documents/2013/resources_available_2013.pdf	Barry Greenspan, ESDC Long Island Region, 631-435-0717	
6	U.S. Department of Commerce, Economic Development Administration	Investments for Public Works and Economic Development Facilities	Characteristic projects include investments in facilities such as water and sewer systems, industrial access roads, business parks, port facilities, rail spurs, skill-training facilities, business incubator facilities, brownfield redevelopment, eco-industrial facilities, and telecommunications and broadband infrastructure improvements necessary for business creation, retention and expansion. To be eligible, a project must be located in or benefit a region that, on the date EDA receives an application for investment assistance, satisfies one or more of the economic distress criteria set forth in 13 C.F.R. § 301.3(a). All investments must be consistent with a current EDA-approved Comprehensive Economic Development Strategy (CEDS) or equivalent strategic economic development plan for the region in which the project will be located,	Grant funding in the amount of 50% to 80% of the project costs depending on the needs of the region	www.eda.gov	Andrew Reid, 267-687-4317, areid@eda.gov	CFDA 11.300
7	FHWA/NYS DOT	1. Surface Transportation Program (Part of Map-21) 2. Congestion Mitigation & Air Quality (CMAQ)	Highway Reconstruction, drainage and streetscape improvements	80/20 federal funding. The NYS DOT will fund part of the local match in the construction phase. Project must be included in the Nassau-Suffolk Transportation Improvement Program and Town must coordinate this with the Suffolk County Department of Public Works. For New York State roads, on-State road system funding may be available. The Town should meet with State officials in order to pursue this.	http://www.nymtc.org/	NYS DOT Planning Unit 631-952-6108 and the Suffolk County Department of Public Works	
8	FHWA/NYS DOT	Local Safe Streets & Traffic Calming Program	Traffic Calming improvements such as Round-A-Bouts, Bump-outs, Turning lanes, Bicycle lanes and facilities	90%/10% grant funding	https://www.dot.ny.gov/index	Lanny Wexler, NYS DOT Region 10, 631-952-6108	
9	NYS DOT	CHIPS Program	Road Reconstruction and Drainage	100% funding annual allocation determined by formula	https://www.dot.ny.gov/programs/chips	Ronnie Wilgeroth, NYS DOT 631-952-6189	
10	NYS DOT	Multi-Modal Program	Road Reconstruction, Drainage, Highway Safety, Streetscape	100% funding. Projects should be requested by the municipality to their State legislators prior to or in January of each year.	NA	Tatmena Afooz 631-952-6026	

Table 4-5
Potential BOA Funding Sources
Governmental Projects that Support Business Development

#	Funding Agency	Program	Eligible Activities	Funding Amounts	Website	Contact	Comments
11	NYS DOT	Industrial Access Program	Necessary highway, bridge or rail projects which facilitate economic development that create jobs.	60% grant, 40% interest free loan that must be paid back in 5 years. $1,000,000 grant/loan limit for project. Eligible projects must be an in integral part of an economic development effort which seeks to retain, attract, expand an industrial facility.	https://www.dot.ny.gov/divisions/operating/opdm/local-programs-bureau/iap	NYS DOT Region 10 Planning Unit - 516-952-6108	
12	U.S. DOT	Transportation Generating Economic Recovery (TIGER)	Large construction projects for Port, Rail, Road, Transit and Bicycle & Pedestrian. Planning funding is available.	80/20 funding shares. $10 million minimum application ($200 million maximum) that must prove five year long-term outcomes for safety, economic competitiveness, state of good repair, livability and environmental sustainability. Applicant must document a positive benefit/cost ratio - a key component for a successful application.	http://www.dot.gov/tiger	US DOT Office of Infrastructure, Finance & Innovation 202-366-0301	
13	NYS Council on the Arts	Core Grant Funding	Street art	100% funding for small grants	http://www.nysca.org/	212-459-8800 Various program coordinators	
14	NYS DEC	Urban & Community Forestry Program	Tree Planting -funds can be used for downtown parks	50% matching grants, $50,000 grant limit for large Towns. Municipal forces can be used as the match or part of the match.	http://www.dec.ny.gov/lands/5285.html	Debra Gorka, NYS DEC, 518-402-9425	
15	NYS Office of Parks, Recreation & Historic Preservation	Environmental Protection Fund	1. Land Acquisition for Parks Purposes, 2. Parks Development for active or passive parks	50% matching grants.	http://nysparks.com/	Traci Christian, NYS OPRHP, Long Island Region 631-321-3543	
16	NA	Tax Incremental Financing (TIF)	A Municipality can create a TIF district and issue bonds for improvements based on future revenues resulting from increase assessments. The bonding now applies to both Town and School District assessments	With bond revenues, the municipality can make public improvements that support the district	NA	NA	Municipality may want to consult a law firm familiar with the process. Agreement with the School District would be necessary.
17	NYS Member Item Funding	Funding is through various existing State programs	Varies - Streetscape, road, drainage, and aesthetic improvements would be eligible	Varies depending on State budget. Projects should be requested by the municipality to their State legislators prior to or in January of each year.	NA	NA	Funding has been awarded through the State & Municipal Facilities Program through the Dormatory Authority of NY
18	Federal Legislative Grants	Funding is through various existing federal programs	Varies - Streetscape, road, drainage, and aesthetic improvements would be eligible	Municipalities should contact their federal legislators	NA	NA	
19	NYS Environmental Facilities Corporation	1. Clean Water State Revolving Fund 2.Drinking Water State Revolving Fund	Federal funds for 1. Wastewater Treatment, STPs, and Sewer Infrastructure Improvements (not for sewering new areas.) 2. Drinking Water Facilities Improvements 3. State Funding has been appropriated for this program as well.	Low Interest Loans, Market Rate Loans, Hardship (possible grant funding or principal forgiveness) if area meets income criteria. New in 2015, separate source of NYS grant and loan funding for wastewater and water facilities projects..	http://www.nysefc.org/	Dwight Brown 518-402-6924 (Clean Water) /Michael Montysko, P.E., NYS DOH (Drinking Water)	Project Must be included in NYS Intended Use Plan - Application requires an Engineering Report.

4.6 Actions Required to Facilitate Development in the BOA Study Area

There are a number of recommendations that require legislative or regulatory actions to facilitate redevelopment within the BOA that have been provided throughout this document. The following provides a summary of these actions that are recommended to implement the goals and objectives of this Nomination Plan and achieve the community vision for the Town of Riverhead Peconic River/Route 25 Corridor Brownfield Opportunity Area.

- WSRR Community Designation.
  - Application is currently under review by the NYSDEC.
  - Requires a legislative approval by the State of NY Legislature.
  - Once approved, the Town of Riverhead Zoning Map would need to be amended by approval of the Town Board to reflect the new community designated areas (rezoned to PRC).

- Evaluation and Adoption of a new TDR Program.
  - Requires a Town Code amendment.

- DC-1 District Code Modifications as recommended in **Section 4.1.5** and detailed in Appendix I-1.
  - Town of Riverhead Town Code by the Town Board.

- Modified Zoning for Train Station Block.
  - Town of Riverhead Town Code by the Town Board.

- Requirements for Conservation Easements along Peconic River.
  - Revision of Town of Riverhead Town Code by the Town Board.
  - New Planning Board standards for review of applications for sites fronting along the Peconic River.

- Parking District Modifications.
  - Modify Parking District regulations to require the provision of on-site parking stalls for new residential development.
  - Requires amendment to Town of Riverhead Town Code by the Town Board.

APPENDIX A

Community Survey Summary

Town of Riverhead

Peconic River/Route 25 Corridor Brownfield Opportunity Area (BOA)

Community Survey

February 2014

Executive Summary

To help capture important information in an efficient manner from a broad array of participants, the Town of Riverhead Peconic River/Route 25 Corridor Brownfield Opportunity Area (BOA) Project Team conducted a survey of residents, business owners within Riverhead, people who work in Riverhead, visitors, and people passing through the area. The survey was designed to provide an understanding of who uses downtown Riverhead and how - where they go, what they do, what would compel them to spend more time and money downtown, and what else they would like to see. The survey was conducted over a period of about six (6) weeks during the fall of 2013. It was primarily available online, although to maximize participation, paper copies and collection boxes were placed at the Library, Town Hall, East End Arts Council, and Robert James Salon.

In total, the survey received 812 responses, though not everyone answered all of the questions, and thus there are a varying total number of responses for any one question[1]. Of these responses, more than 50% reported being residents of Riverhead and about 25% reported being visitors, for personal or entertainment purposes. Nearly 70% reported that their main reason for traveling downtown is to go out to eat. Walking along the river and shopping were the second and third most common reasons for visiting downtown.

A significant majority (65%) of respondents said “more unique shops” are one thing they wish there was in Downtown Riverhead or along the gateways of Downtown. About half of the respondents want more cafés and coffee shops (54%), just ahead of “more entertainment” (50%). A large majority of participants appear to be aware of what is already offered around Riverhead. The most well-known features include events at the Suffolk Theater, the weekly farmers' market and crafts show, and the annual cardboard boat race (combined 70% respondents). Specifically within the Route 25 corridors, nearly all respondents (94%) are aware of the Tanger Outlets, and nearly as many (92%) know about restaurants in the area. In addition, nearly all respondents are also aware of the LI Aquarium and more than three-quarters know about the East End Arts Council, Vail-Leavitt Music Hall, Suffolk Theater, and Suffolk County Community College culinary center.

[1] Each survey question received a unique number of responses. Due to this, percentages reported for different questions do not necessarily correlate to the same total number of responses. For full facts and figure, please review the Survey Summary in the following section.

The most common response when asked about safety and security was a desire for increased police presence (42%). There was a significant preference for live officers on foot or bike patrols, as opposed to cameras or officers in patrol cars, as the general consensus is that human interaction is more effective.

To understand what types of businesses (shops), attractions, improvements, and events or programs people think would benefit the town and be successful in Riverhead, the survey asked four open-ended questions, giving people an opportunity to offer their own thoughts and suggestions. The most commonly listed responses included:

- Shops and businesses: Cafés/coffee shops and clothing stores (including several mentions of menswear)
- Attractions: Movie Theater was the most commonly listed
- Improvements: Enhanced or upgraded sidewalks and pedestrian safety
- Events and programs: Live music and more festivals

When asked about how much money they typically spend during a visit to Riverhead, a large majority of participants (65%) reported spending more than $20, while 30% spend $50-$100, and 35% spend $20-$50. A majority of money spent by respondents while in Riverhead is on meals (89%), snacks and beverages (48%), and merchandise (46%) respectively.

Finally, most respondents (89%) heard about the survey either through email, social media, or another online outlet. Respondents who took this survey live in over 100 zip codes with the majority living on Long Island and 36% from the Riverhead zip code of 11901. The majority (88%) of survey respondents are over the age of 30; and 48% fall within the 30-54 age-group.

Contents

Town of Riverhead Peconic River/Route 25 Corridor Brownfield Opportunity Area (BOA) i

Community Survey i

Executive Summary i

Section 1: Survey Results 2

Q1. What is your connection to Riverhead? 2

Q2. How often are you in Downtown Riverhead? 4

Q3. When in Downtown Riverhead, I usually _____. 5

Q4. I wish there was/were _____ Downtown or along the gateways to Downtown. 7

Q5. Did you know that Riverhead already offers the following? 10

Q6. Did you know that the gateways to downtown Riverhead offer the following? 12

Q7. Did you know that Downtown Riverhead is home to the following? 13

Q8. The Town is in the process of installing additional lighting and cameras to make sure everyone feels comfortable Downtown at night/after dark. Do you have additional suggestions for how to achieve this goal? If so, please explain. 13

Q9. Provide any ideas you have for Downtown Riverhead and the gateways to Downtown in the spaces provided below. 15

Q10. While in Riverhead, I usually spend about _____. 21

Q11. While in Riverhead, I typically spend money on _____:. 22

Q12. I heard about this survey at/through _____. 23

Demographics Questions 24

Q13. What is your zip code? Or, if you're from another country, what is the name of your town and country? 24

Q14. What is your age group? 25

Section 2: Intercept Survey Results **26**

Q1. How often are you in Riverhead? 26

Q2. What do you do when in Riverhead? 26

Q3. What would your ideal Riverhead consist of? 27

Q4. What other towns do you like to visit and what do you like about them? 28

Q5. What is the zip code where you live? 29

Summary of Results

To help capture important information in an efficient manner from a broad array of participants, the Town of Riverhead Peconic River/Route 25 Corridor Brownfield Opportunity Area (BOA) Project Team conducted a survey of residents, business owners within Riverhead, people who work in Riverhead, visitors, and people passing through the area. The survey was designed to provide an understanding of who uses downtown Riverhead and how - where they go, what they do, what would compel them to spend more time and money downtown, and what else they would like to see.

Initially the Team developed three separate surveys aimed at different populations that visit, live in, or work in Riverhead. The idea was to target these populations separately and tailor questions to them in order to isolate perceptions and opinions based upon participants relationships to the Study Area. After much discussion, it was decided that a single survey would be most efficient and yield the highest response rate, and so questions were combined and participants were asked to identify their relationship to the Study Area to ensure the same types of information could be collected and analyzed.

The survey was conducted over a period of about six (6) weeks during the fall of 2013, and was primarily available online. In addition paper copies of the survey and collection boxes were placed at four locations throughout Riverhead: the Library, Town Hall, East End Arts Council, and Robert James Salon. The survey was promoted through a combination of online outreach via email, social media, and announcements on websites such as the School district. The Town's official press release was picked up by Riverhead Local, Riverhead News Review, Riverhead Patch, Long Island Business News, and Newsday. In addition, flyers announcing the survey were distributed to businesses throughout Riverhead.

The Project Team also conducted "intercept" surveys in-person during the Country Fair on October 13, 2013, asking people to answer a short selection of key questions from the survey or passing out business cards with a link to the online version for people to take at their convenience. The questions selected for the intercept survey were those the Project Team would be most useful to the BOA project and that were easiest to answer in-person.

In total, the outreach efforts yielded 812 responses to the paper or online survey, while the in-person "intercept survey" yielded 48 responses, for a total of 860 responses. The results presented in Section 1 pertain to the main (paper/online) survey, while the results of the intercept survey are presented in Section 2.

Section 1: Survey Results

The Town of Riverhead Peconic River/Route 25 Corridor BOA Community Survey targeted five major areas of study by asking participants to respond to 15 questions designed to assess who lives or works in or visits Riverhead, what they do while in Riverhead, and what would keep them coming back again. These five major areas of assessment looked at: 1) participants' connection to Riverhead- including how often they visit and what they would like to see more of (i.e. shops, activities, parks, etc.); 2) participants' knowledge of existing activities, events and attractions; 3) open ended questions to solicit suggestions to improve safety and ideas for new types of shops, attractions, and town improvements; 4) average dollar amount spent per visit to Riverhead and what participants typically spend on (i.e. shops, activities, events); and 5) demographic information such as respondent's age and town of residency. Below is an overall summary of these results, highlighting major themes and trends.

Of the 812 survey responses, more than 50% reported being residents of Riverhead and about 25% reported being visitors, for personal or entertainment purposes. Most respondents are in the Downtown area everyday or at least once a week, typically on weekdays. Results indicated that respondents barely travel to the downtown area on weekends. Nearly 70% of respondents reported that their main reason for traveling downtown is to "go out to eat," while walking along the river and shopping were the second and third most common reasons for visiting downtown. Respondents indicated that they usually spend between $20 and $50 during their visit and typically spend money on meals (86%), snacks/beverages (48%) and merchandise (46%).

The following provides a summary of results for each question.

Q1. What is your connection to Riverhead?

Residents account for more than half of the respondents, and emerged as the top connection to Riverhead. Visitors, for personal or entertainment purposes, rated as the second highest, accounting for just over a quarter of the overall respondents. The employees category came in third. 100% of respondents answered this question.

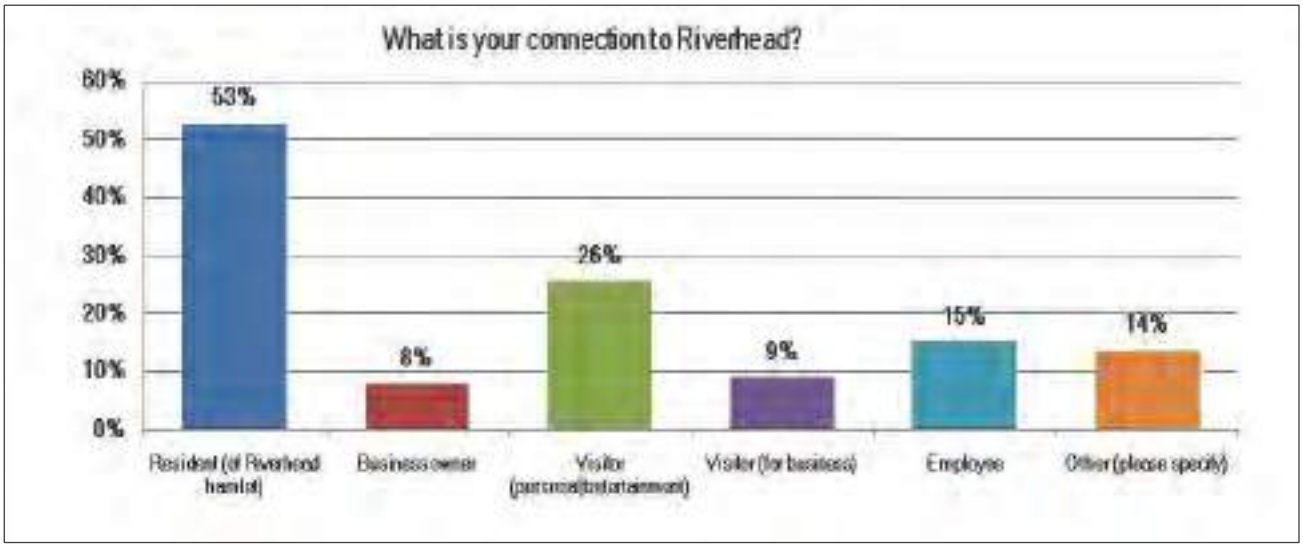


Figure 1. How participants are connected to Riverhead.

A majority of those that responded to the survey are residents of Riverhead. More than a quarter are visitors. A third of respondents do business in Riverhead, whether they are business owners, employees, or visit Riverhead for business purposes. One quarter of participants are in Riverhead for personal or entertainment purposes.

In addition to the response choices provided, respondents were asked to list any affiliations not included and details they wished to share. 111 respondents offered additional information. Nearly 40% of the comments indicate that respondents are residents of nearby communities, towns, and hamlets within Suffolk County, such as Riverside, Flanders, Calverton, Aquebogue, and others. Roughly 22% of the respondents who added comments indicated they are past or previous residents of Riverhead.

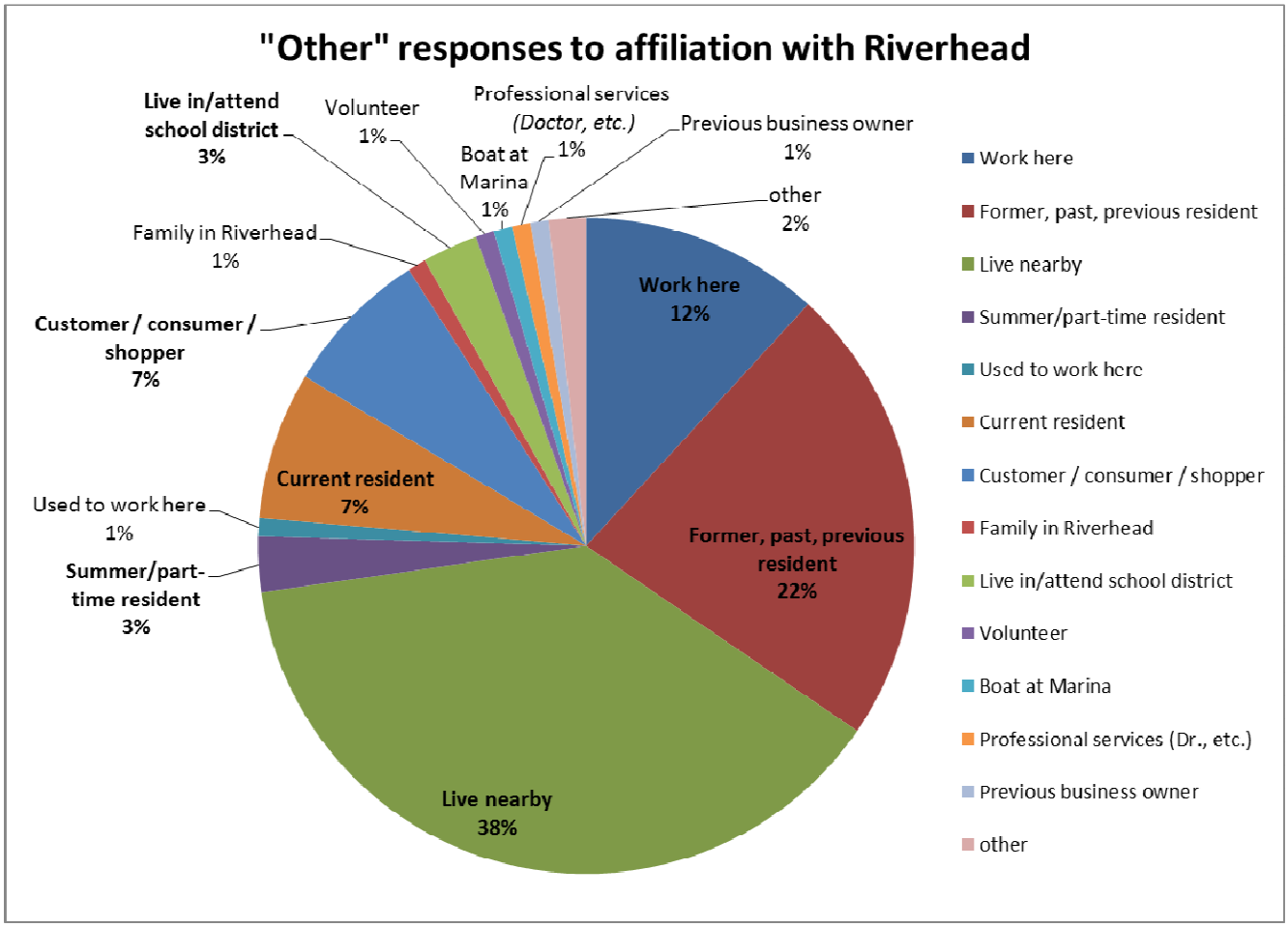


Figure 2. Additional responses to how people are connected to Riverhead (comments).

Q2. How often are you in Downtown Riverhead?

Question two asked how often participants visit or spend time in Riverhead. In line with responses to question one, which indicate that a large proportion of respondents live in Riverhead, most are in the Downtown area everyday or at least once a week. Most visits are during the week and occur a few times per month or a few times per year. Results indicated that respondents rarely spend time Downtown during the weekends. Only 13 respondents skipped this question.

Participants were asked both about how frequently they are in Riverhead and which time of the week (weekdays or weekends) they are most often in Riverhead. The frequency with which survey respondents visit downtown Riverhead varies significantly. One-fifth of respondents are in Riverhead once per week and another fifth are there every day. Those who visit on a weekly basis or more were more likely to visit during the week. 16% of respondents report going to Riverhead a few times a month or less (a few times a year, rarely, or only once), whereas less than 15% report only going a few times a year. In terms of weekends versus weekdays, more people report visiting Riverhead most weekdays than most weekends.

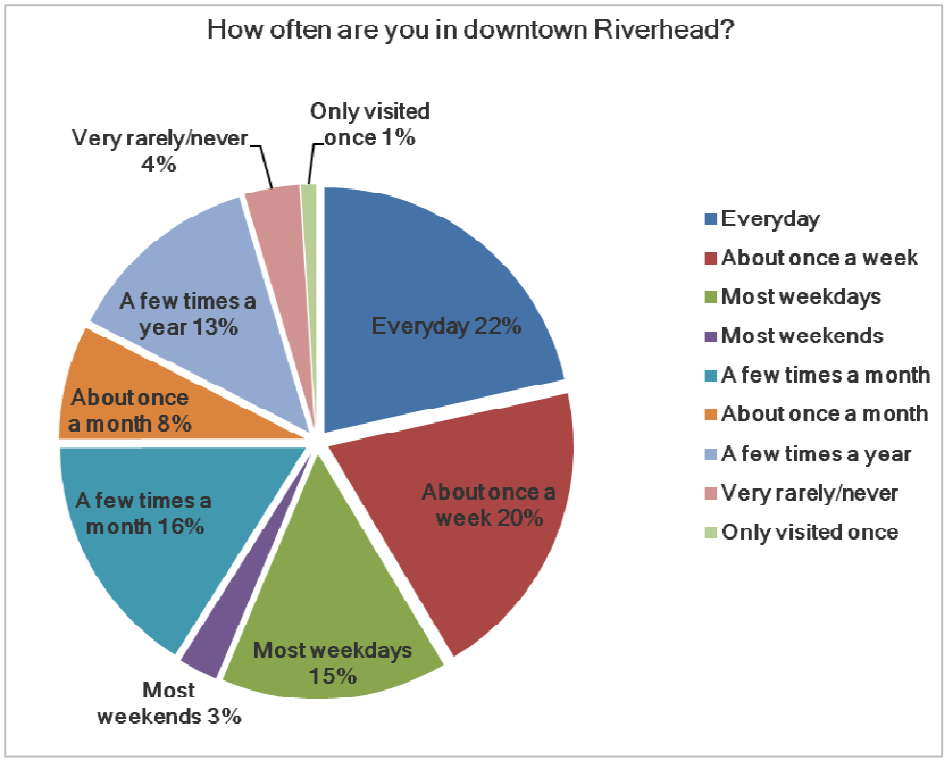


Figure 3. Time spent in Riverhead.

Q3. When in Downtown Riverhead, I usually _____.

More than 750 participants responded to this question. The most common activity participants report doing while Downtown is to "go out to eat." Nearly 70% of respondents indicated they go out to eat when Downtown. "Walking along the river" emerged as the second most popular activity to do Downtown (42%), followed by "shop" (39%), which slightly edged out "attend outdoor events" (38%). These activities rate relatively highly in comparison to other options, all of which were selected by fewer than 28% of respondents. Survey results indicate that respondents value outdoor activities and events, as well as the scenery (river). The least popular activities among respondents are related to day-to-day business (attorney, accountant, etc.) and personal services (salon, barber, pet groomer, etc.).

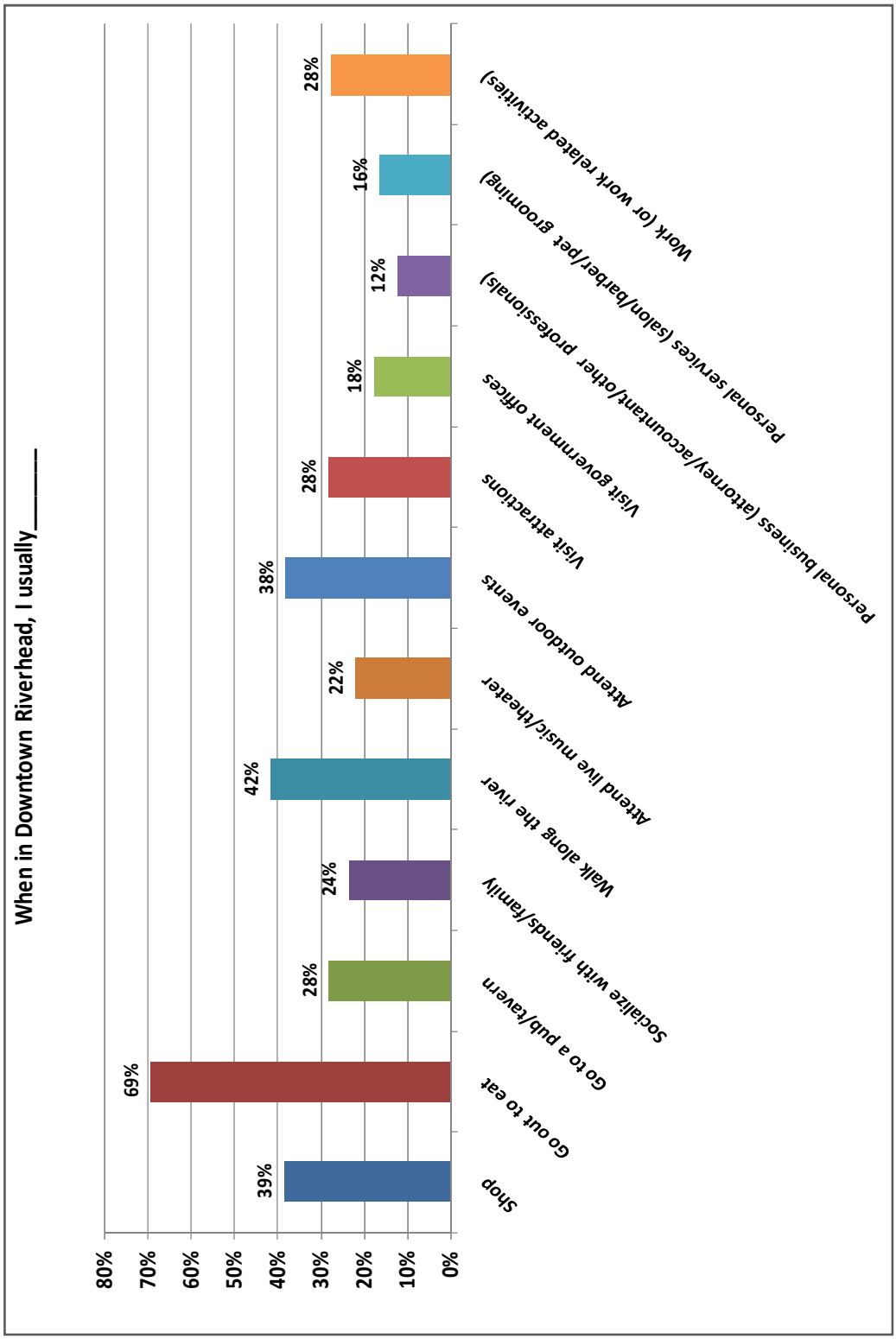


Figure 4. What respondents typically do in Riverhead.

In addition, 70 respondents elaborated on the answer choices, providing comments and additional explanations of what they do in Downtown Riverhead. The most common answers given indicate that people tend to "pass through" or conduct business, or participate in leisure activities. Roughly 16% of

those who provided additional information suggest that they drive through town or do nothing there. Other popular categories - business and leisure activities - include activities such as shopping, banking, going to the pharmacy or hardware store, bakeries, the farmers' market, and cafes, as well as going to the hardware store, vacuum store, and shopping on Route 58. In terms of leisure, people walk dogs, fish or kayak, go to car shows, look at old theaters, and visit Polish Town.

Sports and recreation is also popular, and includes outdoor activities such as kayaking, boating, walking, and watching high school football games, as well as fitness activities like music or dance classes and going to the gym. Several respondents indicate they or their families attend school or religious services in Riverhead, and a number also mentioned using the Library. Arts and entertainment activities were also mentioned and include things like visiting art galleries and the aquarium.

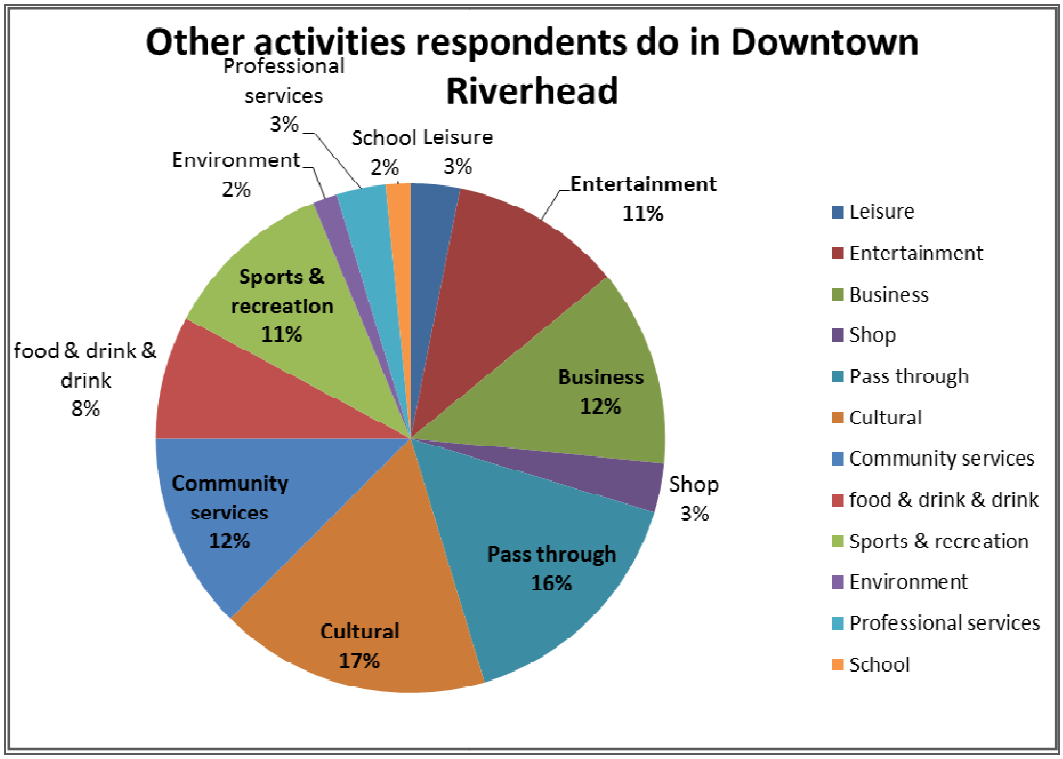


Figure 5. Other responses to what people do in Riverhead (comments).

Q4. I wish there was/were _____ Downtown or along the gateways to Downtown.

Question four was designed to understand what people want in Downtown Riverhead or along Route 25 leading into Riverhead. The purpose of the question is to understand what types of uses and businesses might be supported by the community. More than 700 survey respondents answered this question. The top response was "more unique shops." A significant majority (65%) of respondents selected this answer. Close to half want more cafes and coffee shops (54%), just ahead of "more entertainment" which came in third (50%). **These answers suggest that a substantial proportion of participants are looking for places where they can interact, socialize and be entertained.** Following entertainment were "more restaurants" and "more family-friendly activities" which were nearly equal, garnering support from just over 40% of respondents each. **Broadly categorized, these answers suggest a desire**

for "things to do" as well as for places to eat, drink, and be social - a common theme throughout comments made in response to survey questions. Respondents also expressed some desire for improved outdoor or recreational opportunities, to be achieved through improved sidewalks and paths, open space and parks, and better access to the river.

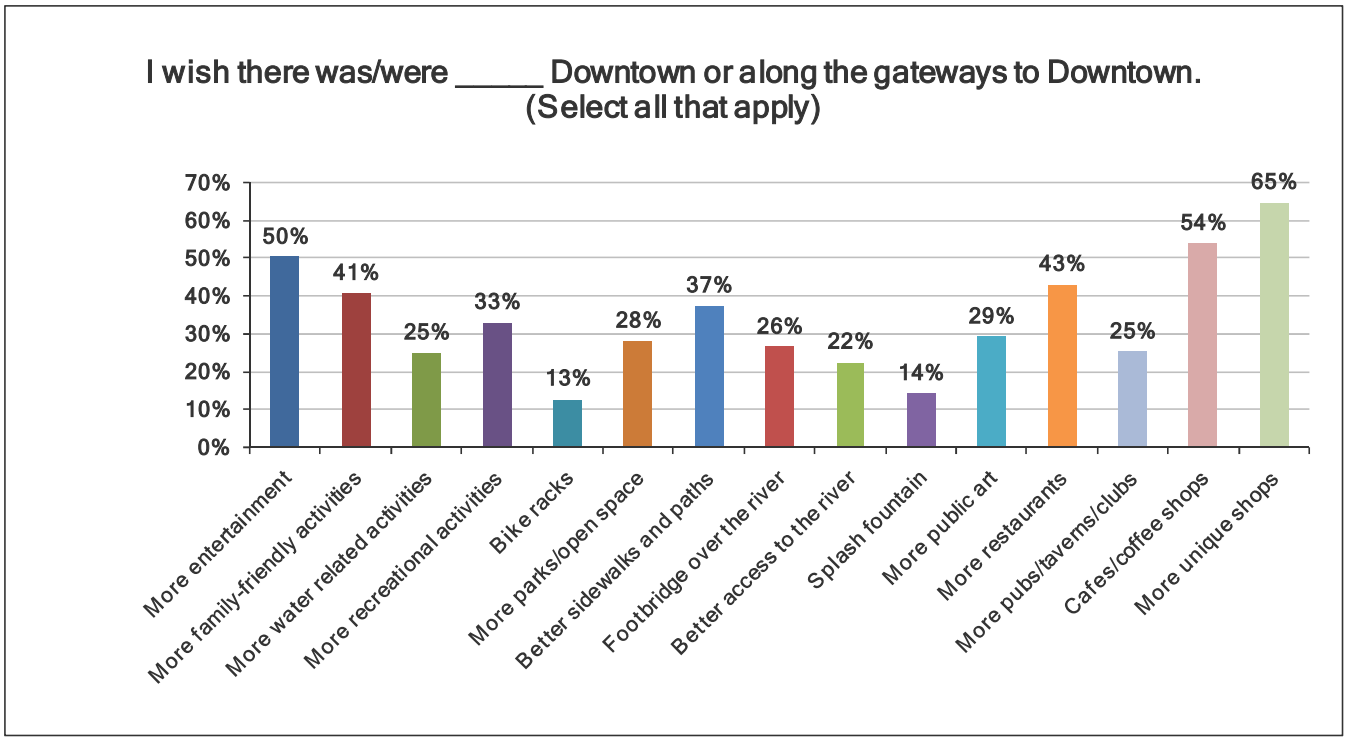


Figure 6. Desires for Downtown Riverhead.

A total of 207 comments were made in response to this question, and were categorized according to the main issues or content they address, such as entertainment, restaurants and dining, safety concerns, and others. The word cloud below represents the words that appeared most frequently in the comments made in response to Question four. The larger a word appears, the more frequently it was used. Specifically, the most common categories and sub-types were as follows (percentages represent the proportion of total comments that contain or mention items listed):

Figure 7. Common words used in comments about what respondents wish there was in Downtown Riverhead.

- Activities and entertainment: 19%
  - Movie theater: 12%
- Safety: 17%
- Shopping: 9%
  - Grocery or food store: 4%
  - Trader Joe's: 4%
- Restaurants and dining: 6%
- Cleanliness: 4%
- River access and activities: 4%

Comments grouped into the entertainment and activities category mentioned activities geared toward individuals under the age of 50, activities that are kid- or family-friendly, that are affordable, and that are outdoors. Comments about safety mentioned the need for additional lighting and police presence; many specifically suggested foot or bike patrols as opposed to officers in motor vehicles. Those that mentioned shopping range from very general ("more shops and boutiques") to specific types and names of stores, such as grocery, book, or clothing stores, or Cost Plus World Market, Kohl's, and Trader Joe's. Many comments mentioned restaurants and eateries with outdoor seating, views of the river, and more affordable options. Some mentioned the need for family- or kid-friendly restaurants, and one indicated a lack of Kosher options at the Tanger Outlets. Other comments expressed participants desires for a cleaner Riverhead in general - less litter, for example, and for more activities and opportunities that take advantage of the river, such as more kayak or canoe launches, safe walking paths along the river, and even a boardwalk type attraction, similar to the Riverwalk in San Antonio, TX.[2]

The remaining comments were grouped into about 15 additional categories, the most common of which are as follows (in order of most to less common): music and concerts; recreation; walkability; cafes and coffee shops; and parking and traffic. Several comments were specifically made questioning the need for a footbridge over the river, suggesting to close the streets for festivals more often, bringing back the blues festival, playgrounds suitable for children, and to attract a "Book Revue" East (a Riverhead location for the store in Huntington).

Recurring suggestions/comments include:

- Safety: increase police presence; 24hour-full-time station; reduce criminal activities, drugs, loitering; cameras to reduce crime; better lighting; additional security
- Movie theater
- Cleaner environment; clean up trash, more recycling
- Bring in a grocery or food store like Trader Joe’s
- More parking, or more easily accessible parking
- Better crosswalks, pedestrian-friendly walkways
- Footbridge not needed (few responded)
- Convert, tear down, or rehabilitate old buildings and houses
- Additional better quality entertainment and activities needed; affordable and/or inexpensive shopping, attractions, events; river-view restaurants; public art
- Improve downtown image
- More professional businesses, unique shops
- Places to live/apartments

In addition to the common comments made, several unique and/or very specific comments were offered:

- Close Main Street on occasional weekends (in summer), bring in artists selling goods in stores like Port Jefferson years ago
- Raise the Peconic Ave. bridge so canoes can pass underneath

[2] For more information about the Riverwalk, visit the official website: http://www.thesanantonioriverwalk.com/.

- Fenced in playground to bring families
- Bring back the Post Office
- More activities and entertainment, including at the Suffolk Theater, that cater to younger crowds
- More holiday lights
- Explore making Main Street one way and/or with diagonal parking on one side of the street
- Facade improvements or "facelifts" for streets along Route 25
- Create better connections between the river and Main Street, and between East and West Main Street
- Walking path along West Main and the river that provides opportunities for fishing, benches, etc.
- Improve the walking and browsing experience along Main Street
- Make the river an asset and an attraction: draw attention to it, connect it to downtown, orient businesses and restaurants toward it
- Explore bringing an indoor marketplace like The Harbor in Baltimore or Faneuil Hall in Boston
- Attract more professional services and offices, not just retail - to serve residents needs and provide jobs
- Consider a festival for area nonprofits that doesn't offer food, so attendees support restaurants
- Attract an arcade or roller rink

Q5. Did you know that Riverhead already offers the following?

Question five asked about participants awareness of events and activities that take place in and around Riverhead. Answers may indicate either that such events are thoroughly promoted or that respondents are in tune with what happens in and around Riverhead. A large majority of participants appear to be aware of what is offered around Riverhead. The most well-known options include events at the Suffolk Theater, the weekly farmers' markets and crafts show, and the annual cardboard boat race. More than 70% of respondents are aware of these events. On the other end of the spectrum, just over one-third of respondents are aware of antiques shows and movie nights that take place in Riverhead.

<u>Top Five most widely-known events among respondents:</u>

1. Weekly events at Suffolk Theater
2. Weekly Farmers' Market and Crafts Show
3. Annual cardboard boat race
4. East End Arts Council gallery shows and art classes
5. July 4th Celebration

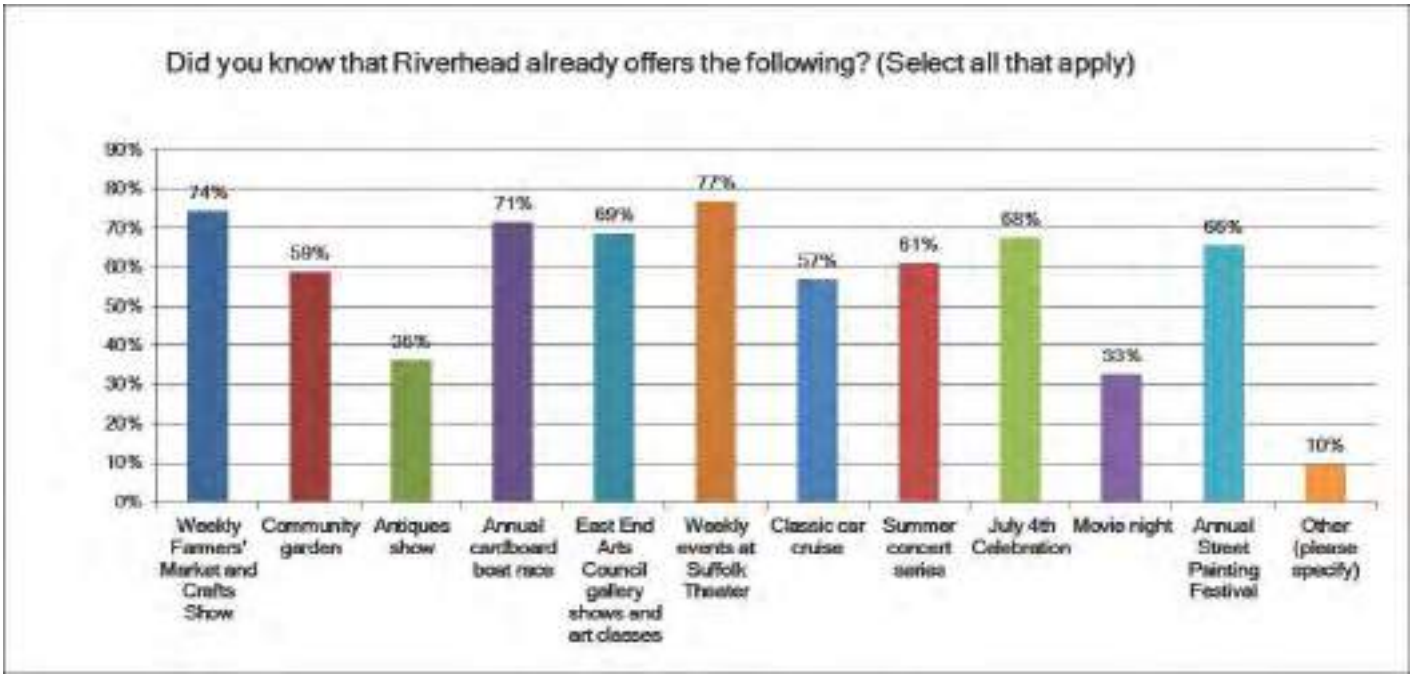


Figure 8. Familiarity with activities and events that take place in and around Riverhead.

Dozens of respondents commented on the selection of events, adding items that were not included and commenting on the variety and quality of those activities and attractions. The Riverhead Country Fair was the most commented-on item, followed by the farmers' market, for which several respondents had specific suggestions:

- Should accept Supplemental Nutrition Assistance Program (SNAP) benefits on weekends too - "should have inclusive community."
- Should have more vendors, longer hours to accommodate working people.
- Did not know about it - should promote it more.

Fishing and boating activities, such as the snapper derby were mentioned. Music events were commented on favorably, but respondents indicated a desire to resurrect the blues festival, and to have more variety of musical events in Riverhead. Some offered Westhampton Performing Arts center as a comparison. Town events such as the bonfire and fireworks displays were also mentioned. One person said the Town fireworks "took my breath away."

Several comments revealed that participants had little to no knowledge about these attractions and events, and specifically stated that better promotion and advertising is needed, while a few indicated that people don't come to the area for any of these because parking and traffic are too difficult, because they have a negative perception of Riverhead, or because of safety concerns. Specific suggestions were made for improved programming at the Suffolk Theater and a couple of comments suggested that while these offerings are nice, they are either too few and far between (need more activity on a regular, consistent basis) or they are too common and overlap with what other communities do, so they offer no particular draw to Riverhead. One or two of the comments suggest that participants did not previously know of

certain events, such as the farmers' market, until taking this survey, and that they should be better promoted.

Q6. Did you know that the gateways to downtown Riverhead offer the following?

Question six is similar to question five in that it aims to provide a sense of awareness about amenities in and around Riverhead, but specifically within the Route 25 corridors approaching Riverhead - the "gateways." The 721 people who responded to this question are generally highly knowledgeable of the attractions listed. More than 62% and as many as 94% of them have heard of each of the features listed. Nearly everyone (94%) is aware of the Tanger Outlets, and nearly as many (92%) say they know about restaurants in this area.

In addition to indicating they do or do not know about selected featured, 46 respondents commented on this question. Many offered additional assets and positive characteristics or amenities, such as the library, aquarium, historical society, breweries, and the rail road station.

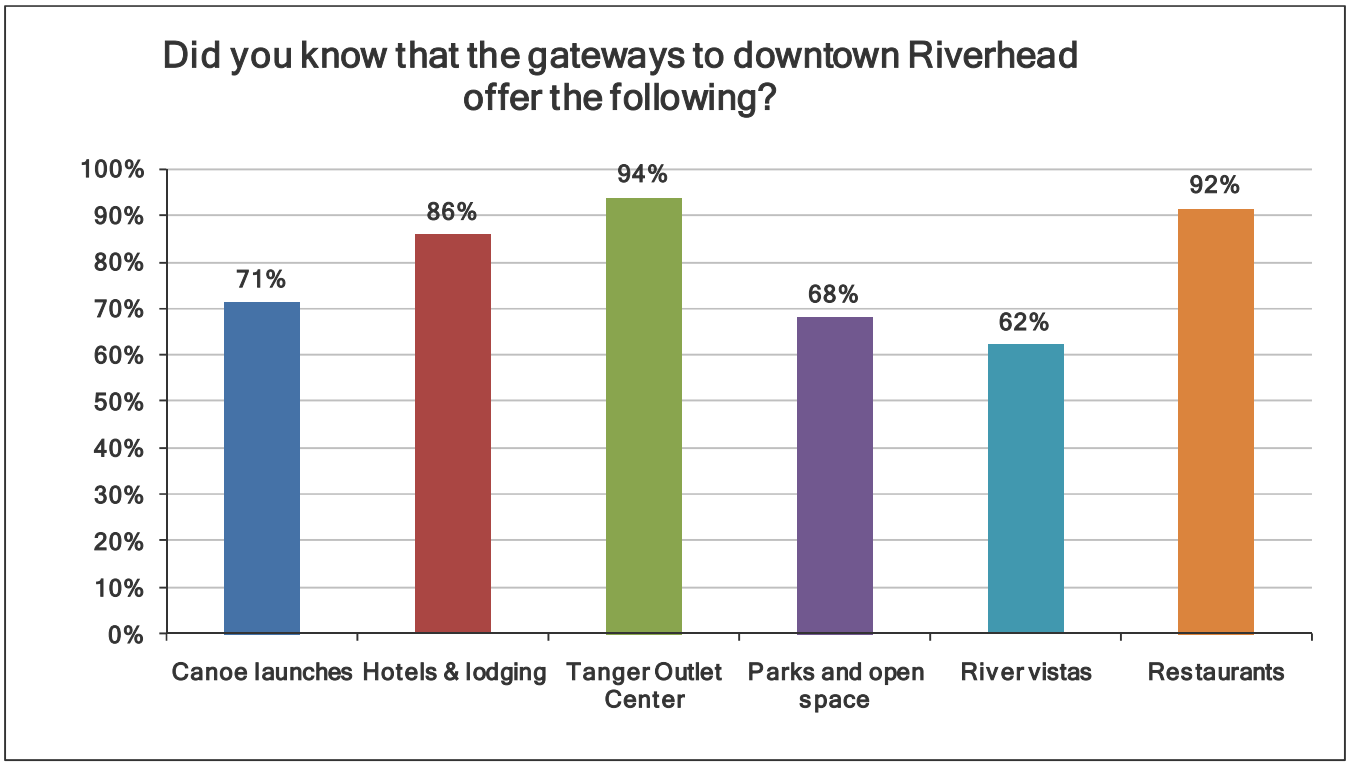


Figure 9. Familiarity with amenities and attractions along the Route 25 corridor leading into Riverhead.

Others reported on negative characteristics or perceptions of the areas, citing the need for improvements and sometimes offering specific suggestions. For example, a number of comments touched on the need to address criminal activity and for a stronger police presence, as well as noting that the river-related amenities (river-walk area, canoe and kayak launched) are perceived as unsafe or intimidating. Other comments alluded to the fact that area hotels are either too expensive or too run-down. Several participants observed that Tanger and downtown are somewhat at odds: people who go to Tanger usually do not go downtown and Tanger may serve to keep people away from downtown. A few comments noted that restaurants are too expensive or serve as bars rather than restaurants. Other

comments noted that underutilized and run-down properties along the waterfront and the western approach to Downtown should be redeveloped, revitalized, and that more evening activities and nightlife are needed. Currently most businesses shut down at night and no one is on the street. Participants expressed that it would be nice to be able to walk around and feel safe.

Q7. Did you know that Downtown Riverhead is home to the following?

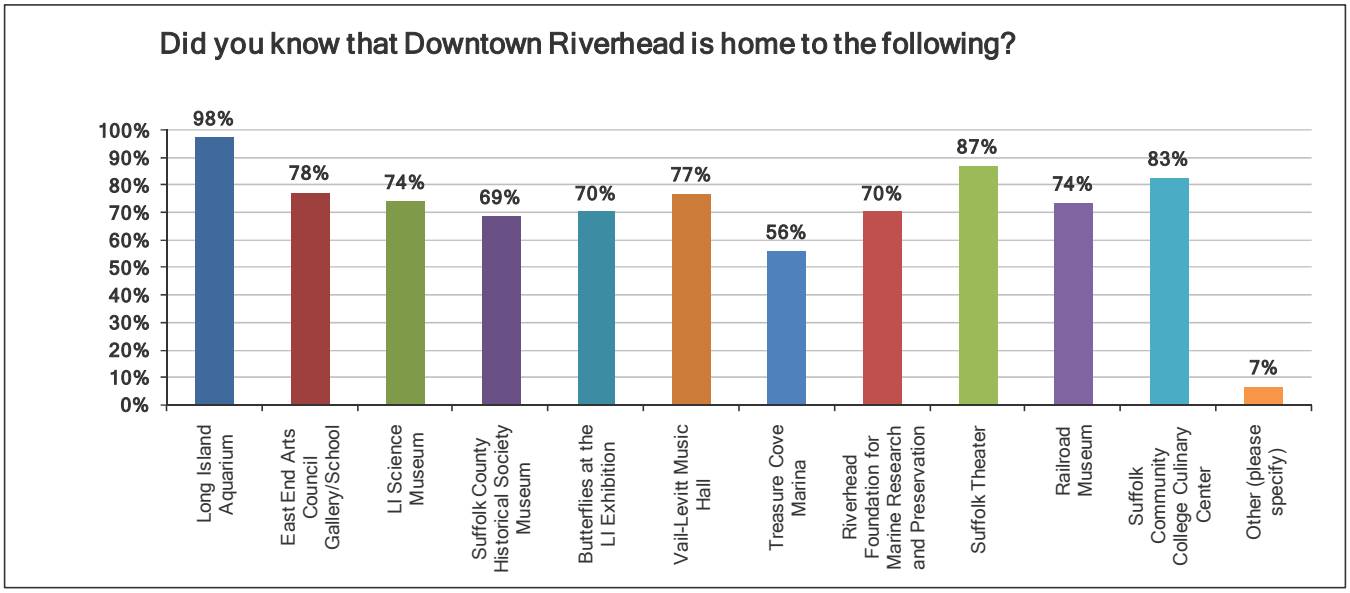


Figure 10. Familiarity with amenities and attractions within Downtown Riverhead.

Building upon the previous two questions, question seven was intended to gauge awareness of amenities, attractions, and activities specifically within the Downtown core. More than half of the 700-plus respondents indicated they are aware of all of the attractions and amenities listed. Nearly all are aware of the LI Aquarium and more than three-quarters are aware of the East End Arts Council, Vail-Leavitt Music Hall, Suffolk Theater, and Suffolk Community College culinary center. The least well-known is the Treasure Cove Marina, although more than 50% of respondents do know of its existence.

In the comments responding to question seven, participants named several amenities and features located in Riverhead that were not listed among the answer choices, including: the library, courts, jail, and microbreweries. Restaurants and eateries were also listed as attractions. Several comments elaborated on the pros and cons of the amenities or attractions listed. Common comments show that attractions such as the Aquarium and special exhibits or performances are often too expensive and that many people do not feel safe in Downtown Riverhead. Others indicate support for better or improved transportation, a better variety of attractions and programming (particularly for young adults), and more convenient or accessible hours.

Q8. The Town is in the process of installing additional lighting and cameras to make sure everyone feels comfortable Downtown at night/after dark. Do you have additional suggestions for how to achieve this goal? If so, please explain.

Question eight asked participants for feedback and suggestions about improving safety and security, specifically in Downtown after dark. The question served two primary purposes: first to acknowledge

and promote the Town's efforts to address security concerns, and two, to elicit additional suggestions for how to make people more comfortable downtown at night. As expected, this question generated a range of responses. 435 respondents answered the question, offering a range of suggestions for how to make people feel safer downtown. The most common response was increased police presence - but human officers present throughout downtown at all times of day and night. More than 42% of responses indicated some need for additional police presence. There was a significant preference for live officers on foot or bike patrols, as opposed to cameras or in cars, as the general consensus is that human interaction is more effective. Other common themes within the responses were to reduce the number of people loitering within and around downtown, attract businesses or uses to the vacant storefronts, and to bring more people onto the streets downtown.

Overall, participants expressed support for additional cameras; however, a number of respondents feel that there is potential for cameras to be substituted for real policing and/or for cameras to become an invasion of privacy. Not all respondents feel Riverhead is unsafe: several reported never having problems, or feeling safe during the day or at times when there are a lot of people out and about, indicating that it is in part, a lack of people that contributes to feeling unsafe. Lighting was another common comment: participants generally expressed support for more and better lighting, targeted to specific areas such as parking lots and alleyways, although a number of people cautioned against over-lighting, as it might drive away potential patrons or do more harm than good. A number of comments suggested that tougher enforcement of laws against drug use or dealing, prostitution, and loitering would help improve safety and reduce the need for constant patrols by police officers. Throughout many of the safety-related comments, respondents stressed that any and all measures should be carefully considered, so as not to create an atmosphere that appears unsafe because of all the police, cameras, and other safety measures, which might only serve to keep more people away longer.

> *"Give the connecting side streets the same thing that Tanger and the new shopping areas on Route 58 have. Widen and level the sidewalk enough for baby strollers to pass one another from opposite directions, trim the trees and add more lighting like Pulaski Street in Polish Town has."*

Port Jefferson, Patchogue, and Greenport were cited repeatedly as examples of successful downtown areas that have addressed many of these same issues. A significant proportion of responses also pointed to a wider variety of and timeframe for activities - music, shops, and nightlife in general - would help bring more people downtown and keep the area more active for a longer period of time. For example, if stores would stay open until 8:00 or 9:00p.m., it was argued, people could shop after dinner, resulting in the presence of more people on the streets in the evenings. A few respondents touched on the importance of pedestrian safety, citing a need for sidewalk repairs, flashing lights at crosswalks, and better enforcement of state laws that require cars to stop for pedestrians in the crosswalks.

Below are highlights from the most common comments and the more innovative ideas put forth, grouped into several categories: safety and security; navigation through Downtown; attracting people; and improving the atmosphere.

- **Improve safety and security:**

    - More police/security personnel with knowledge of the area to answer questions
    - More foot or bicycle patrols, COPE Units or police officers spending time downtown - "Cameras don't make it safe, cops make it safe"
    - Additional lighting, especially in parking lots and alleys
    - Discourage loitering; enforce loitering laws
    - Explore use of discrete emergency call boxes
- **Improve navigation throughout Downtown:**
    - Kiosks for directions (e.g. "You are here").
    - Main Street should be closed to vehicle traffic at certain points of the week in the evenings. Then pedestrians could walk freely among some of the restaurants/cafés/shops, similar to Beale Street in Nashville, TN - kind of an open atmosphere.
    - Pedestrian safety: audible crosswalk count-down signals, or crosswalks that light up when someone steps into them (like in East Hampton)
    - More and improved sidewalks and bridges for crossing the River in various locations
- **Attract more people to Downtown:**
    - Advertise and promote existing attractions (a few participants acknowledged that they were not aware of some of the items listed in other questions and would keep eyes and ears open for these types of events and activities)
    - Local wine and food festival
    - Partner with colleges and universities to offer outdoor music
    - Music and nightlife
    - Build upon the growing 'foodie' culture - attract a kitchen gadget store
- **Improve the atmosphere:**
    - Al fresco or outdoor dining
    - Lights on trees year-round
    - Repurpose vacant storefronts, even on temporary basis
    - Solar-powered lights
    - Allow or encourage more stores and businesses to open or orient to the water

Q9. Provide any ideas you have for Downtown Riverhead and the gateways to Downtown in the spaces provided below.

To understand what types of businesses (mainly meaning shops and services), attractions, improvements, and events or programs people think would benefit the town and be successful in Riverhead, Question nine asked four separate open-ended questions, giving people an opportunity to offer their own thoughts and suggestions. 524 people answered some portion of this question, although not every person responded to each sub-question: on average 250 people commented on each of the four component questions. Below are some of the most frequently mentioned items (in order of how frequently they appeared in the responses); the answers suggest both ideas to add and items that may need strengthening, review, or improvements.

Table 1 Frequent suggestions offered in response to the four parts of Question nine.

Types of Shops	Attractions	Improvements	Events or Programs
Clothing	Movie Theater	Sidewalks	Events *(river-related, sporting, in empty buildings, concerts, fairs, fitness, kids, etc.)*
Coffee shop	Music	Parking	Festival
Food	River *(activities on / near)*	Lighting	Music
Restaurants	Shops	Stores	Concerts
Boutiques	Boats	Clean	Movie
Antiques	Restaurants	Traffic	Street fair

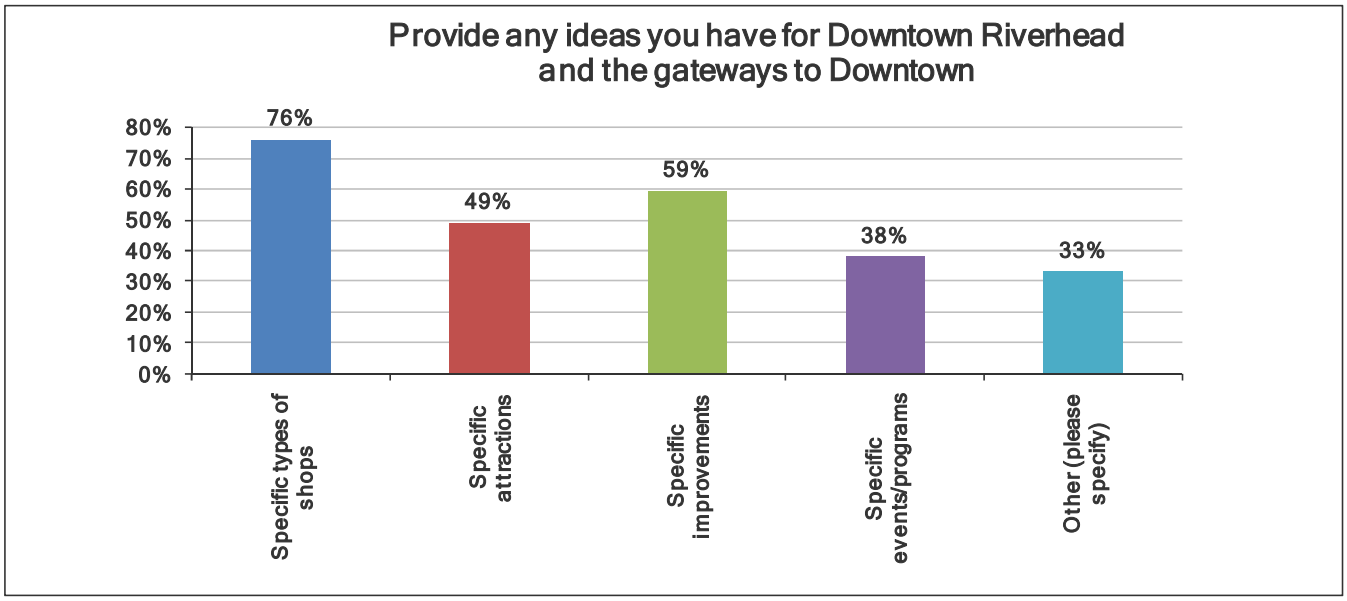


Figure 11. Percentage of respondents that provided ideas for shops, attractions, improvements, and events/programs.

Figure 12. Common types of shops desired by respondents.

Q9: Types of Shops and Businesses

The first part of the question asked about the **types of shops and businesses** people would like to have in Riverhead. The most commonly listed types of shops that respondents would like to see in Riverhead include: cafes/coffee shops, clothing stores (including several mentions of menswear); grocery or specialty food stores; bookstores; antiques, crafts, gift or card stores; and unique and independent boutiques in general. See Figure 12 above for the words used most commonly in the responses to this question.

Q9: Types of Attractions

The second part of Question nine asked respondents about **specific types of attractions** they would like to see in Riverhead. Answers varied widely, but a movie theater was by far and away the most common answer given. Kid- or family-friendly activities and entertainment were close behind, with suggestions for go-karts, skating rinks (ice and roller), arcades, playgrounds, kids museums, pools, and more. Next were river-oriented attractions such as paddle boats, dinner cruises, improved kayak or canoe launches. Many comments indicated that it is important that such activities and restaurants be family-friendly and affordable, and other suggested things that would be appropriate for young adults or couples on date-nights. Festivals, fairs, and outdoor markets were also high on the list, with respondents suggesting live music or theater, art fairs, craft festivals. Some participants called for distinctive features such as fountains, carousels, or a Ferris wheel, while others focused on venues such as cafes; restaurants, bars, and places to grab a quick snack, such as a hot-dog stand or outdoor sandwich shop. A few people suggested that many such attractions exist already in Riverhead and just need to be promoted better. The word cloud below shows some of the words that appeared most frequently in the responses.

Figure 13. Common words appearing in respondents recommendations for attractions in Riverhead.

Several unique and innovative ideas stood out from the more commonly submitted responses. These included:

- Interactive features such as a sidewalk piano or tables with chess and checkers boards on them;
- Mosaics or decorative pavers, especially leading toward the river;
- Festival dedicated to river or marine life, such as a seafood festival;
- Work with the hotels to attract trade shows or professional associations and conferences;
- Explore getting a Federal Judge and Magistrate so that Federal Court cases could be heard in Riverhead; and
- Dinner cruises along the river and/or in the bay.

Q9: Types of Improvements

The third part of Question nine asked about **specific types of improvements** respondents would like to see in Riverhead and the Downtown area. A total of 311 people provided responses. No single issue appeared in a majority of responses; however, the most common improvements include sidewalk conditions and other measures to improve pedestrian safety (including lighting, enforcing speed limits and stopping for pedestrians in crosswalks), as well as improvements to safety and security, such as by adding police officers and lighting, and by reducing loitering and criminal activity (drugs and prostitution mentioned repeatedly). Aesthetics and improvements to the look and feel of Downtown Riverhead was the next most common theme, with respondents suggesting painting, lighting, cleaning up litter, facade improvements or "facelifts" for buildings, keeping up attractive storefronts and window displays, and adding landscape or streetscape elements like benches. The Peconic River is seen as an important asset by many, and responses offer a number of suggestions for capitalizing on it: drawing attention to the river, strengthening connections between the river and Main Street, adding amenities, orienting businesses and restaurants to face the river, and improving overall access to the river. Reducing commercial and retail vacancy rates was also important; two dozen respondents commented on this and many cited reducing vacancy as a way of improving safety and how the community looks and feels.

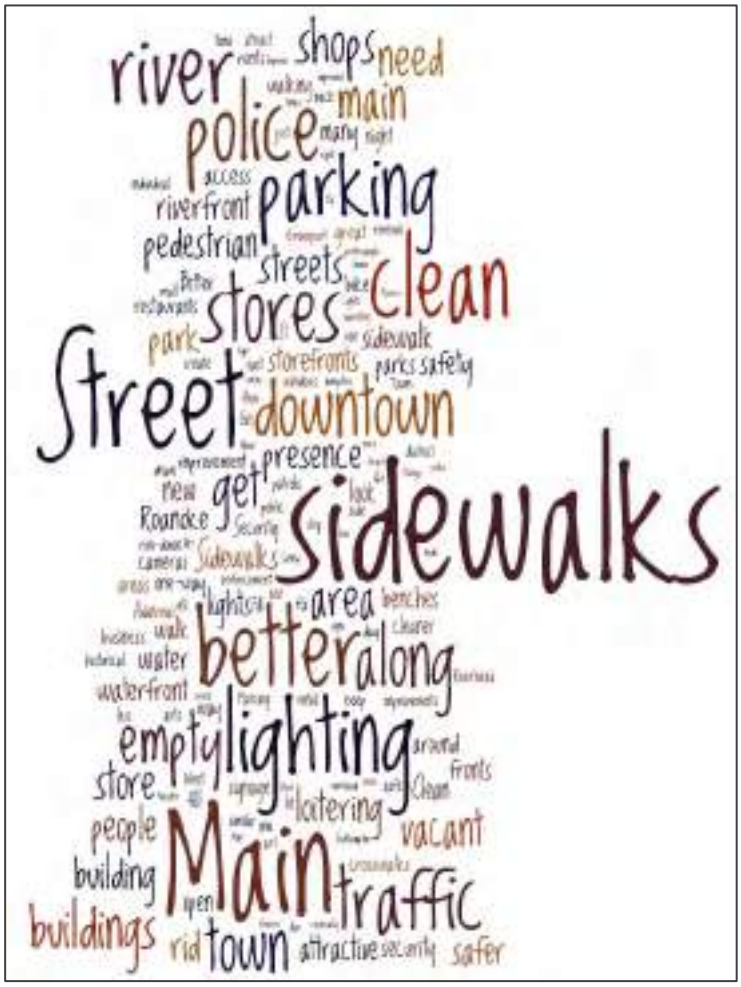


Figure 14. Words appearing in respondents ideas for improvements they would like to see in Riverhead.

Other types of improvements include: improve traffic flow and parking (several participants suggested reducing parking on Main Street and/or making it a one-way street); address loitering; clean up streets, sidewalks, and parks; improve bike infrastructure; design and implement attractive "wayfinding" and signage to direct people and create an identity for Riverhead; develop design guidelines; improve or expand public spaces and activities for people to do; and add public art or visually interesting features such as fountains or plazas.

Some of the more innovative ideas suggested include:

- Consider building upon the success of the arts in Riverhead - look at the South Boston Arts District.
- Create a weekly blog that describes what is going on around town.
- Develop a promotional campaign that focuses on art and install or display more public art, such as a clock, temporary displays

in empty windows, water fountains (for drinking as well as play).

- Make the river more accessible to the public:
    - Create or expand parks, walkways or paths, convert parking lots adjacent to the river into more user-friendly areas, and ensure there are things to do in such places ("Grangebel is much prettier now, but there is nothing to do there").
    - Orient more storefronts and restaurants toward the river.
    - Outdoor dining with views of the river.
    - Make public boat launches nicer and more accessible.
- Focus on rehabilitation and infill development before building new structures.
- Activate the streets more at night by encouraging businesses to stay open later or attracting businesses that are willing to do so.
- Ensure more efficient rail service to and from New York City.
- Consider relocating social service agencies from Main Street.

Q9: Types of Events and Programs

The fourth part of Question 9 asked about the **types of events and programs** participants think would be beneficial and successful in Riverhead. The most common category of events and programs suggested is was live music. More than one-fifth of respondents to this question would like more live music on a regular basis throughout Riverhead, especially, but not limited to summer concerts. Respondents suggested organizing live music at outdoor venues and events, as part of festivals and street fairs, and concerts that are appropriate for families and young kids as well as shows geared toward adults. Festivals and street fairs were the next most common category of event and program. About 10% of respondents to this question indicated they would like Riverhead to host more festivals with a variety of vendors and activities, including art, food, music, crafts, antiques and more. Several people suggested closing Main Street and doing the fair right on the street in conjunction with performances on or near the river. Season- and holiday- specific events and parades, such as for Oktoberfest, Halloween, Thanksgiving and more was another popular category.

A substantial proportion of respondents indicated that events and activities should be more family-friendly and appropriate for kids and young teenagers, and that affordability is a key factor as well. Other suggestions can be categorized as sports and recreation (skating, biking, athletic events or races, etc.), nightlife (events after 5pm, after-dinner entertainment, etc.), arts and crafts, and theater. Five separate survey takers specifically referenced Patchogue's "Alive after Five" events as an example of the types of activities they're looking for. A few individuals suggested better promotion of events and activities. The word cloud below shows some of the more common words used to express preferences for activities and programs.

Figure 15. Ideas for events and programs in Riverhead.

Innovative and unique suggestions offered by respondents for events and programs:

- "Alive at Five" (like in Patchogue)
- Events that promote small businesses
- Hold events in Grangebel and other parks
- Sidewalk and street-front beautification
- An "art hop" where stores stay open late on occasion to showcase local artists work
- Coordinate monthly crawl or tour of existing cultural events and offer packages or discounted tickets
- Events geared toward senior citizens
- Regular events on the 'sidewalk side' to ' generate foot traffic, such as a sidewalk sale
- Riverfront programming
    - One example is Providence, Rhode Island's Festival of Lights (http://waterfire.org/)
- Bring the Blue Angels to Riverhead (like Jones Beach)
- Organize an "I love Riverhead" event showcasing local groups and organizations, including emergency service providers such as the Police and Fire Departments, the hospital, etc., for a family day geared toward families and children to learn about and sign up to volunteer
- We have a lot of great events, but FIRST crime needs to be addressed, acquiring/improving the land surrounding Main Street in addition to Main Street itself, then we can add more events
- Taste of Riverhead, food-related competitions or cooking contests
- Halloween event for kids, trick-or-treating downtown, or Harvest festival
- Encourage pop-up shops, art projects, or events in empty buildings
- Live theater: dinner theater or a festival in multiple venues (East End Arts, cafes, etc.) - with improvisation or site-specific theater - such as Shakespeare on the River

Lastly, 174 respondents provided **supplementary ideas** they have, in the space provided for **additional comment**s. Comments in response to this question range from more broad comments about current conditions in Riverhead to very specific suggestions for approaches to addressing what respondents perceive as key issues facing Riverhead. Some of the more common comments reflect a need or desire for more affordable and family- or kid-friendly food and activities, as well as for young working professionals; concern for pedestrian safety and ideas for making downtown more walkable; diversifying the types of shops and services throughout Downtown - including more professional services or offices (not just retail and restaurants); better, more coordinated promotion of events; and improve safety and reduce crime and loitering. Respondents also made note of other towns or cities that could serve as models for Riverhead, including: Annapolis, MD, Bayshore, Bethesda, MD, Burlington, VT, Greenport, Huntington, New Paltz, Northport, Patchogue, Port Jefferson, and Sag Harbor. Participants also expressed interest in waterfront dining, public art, creating a "quaint" feeling along Main Street, and businesses such as a movie theater, a grocery store, and coffee shop.

Some unique ideas also emerged from the more common answers given:

- Periodically close down Main Street for events and festivals, especially in the summer.
- Incentivize business start-ups, cluster new shops (like where Blue Duck is).
- Offer Town docking on the river and consider a lower per-foot fee that requires money to be spent at Main Street businesses - similar to parking validation, but for boats.
- Create a "Main Street Ambassador" who is responsible for helping keep clean, develop programs, etc.
- Make landlords pay a fine for each storefront that is not rented out after a certain period.
- Invite artists to paint garbage cans/electrical boxes/etc. to brighten and liven -up town.

Several comments made throughout the survey (in responding to several different questions) pointed to a need for a different approach to programming at the Suffolk Theater. Many indicated that while they enjoy the theater it caters towards an older audience, it "isn't hip," should be more contemporary and/or "relevant," and should have more shows that appeal to people under the age of 50. It should be recognized that programming decisions are made by the private owners and employees of the Theater; however, there is perhaps an opportunity to work with the Theater to coordinate more live-arts events or structure programs or events in collaboration with the Town that take survey respondents desires into consideration.

Q10. While in Riverhead, I usually spend about _____.

Question 10 was intended to provide a sense of how much money respondents typically spend as a way of gauging price-points to consider when planning or pursuing additional attractions and amenities for Riverhead. A total of 696 people answered this question.

Most respondents spend between $20 and $50 during a visit to Riverhead. A large majority of participants (65%) spend more than $20, while 30% spend $50-$100 and 35% spend $20-$50. A small proportion (16%) spend more than $100. 12% of respondents chose not to answer the question.

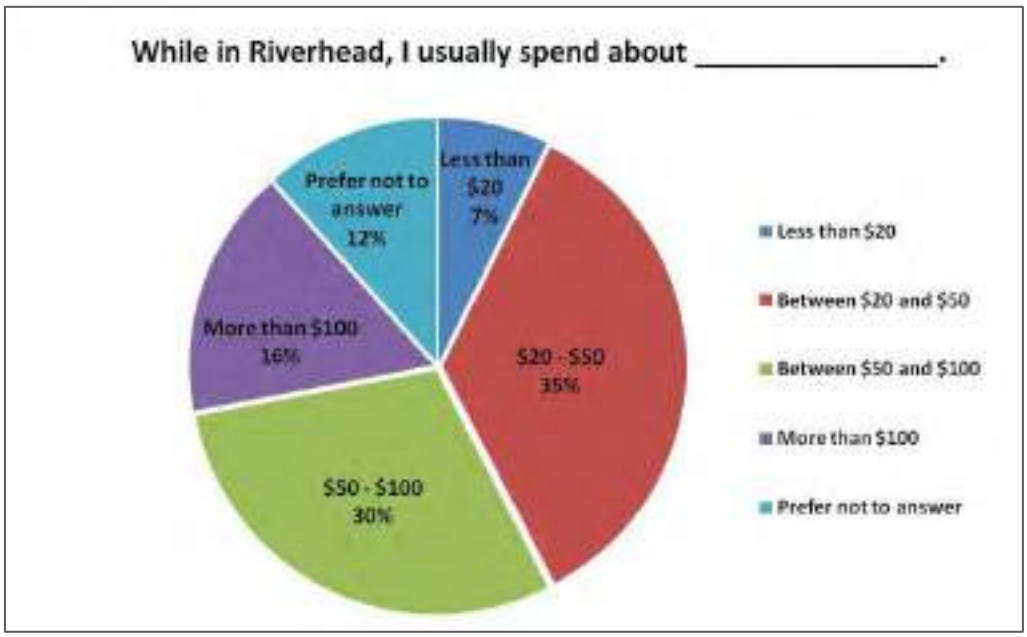


Figure 16. Typical expenditures of respondents while in Riverhead.

Comparing the amounts respondents spend with what they typically spend money on is also useful for understanding the types of attractions and amenities people are looking for or would be willing to support in Riverhead. The next question looks at what people spend money on when in Riverhead.

Q11. While in Riverhead, I typically spend money on _____:.

A majority of money spent by respondents while in Riverhead is on meals (89%), snacks and beverages (48%) and merchandise (46%) respectively, as illustrated in Figure 17 below. One-quarter of participants answered that they spend money on services and/or admissions each.

Respondents who typically spend less than $20, tend to spend their money on meals or snacks and beverages. These categories account for 65% and 39% of people in the "less than $20" category. While meals are consistently the most common item on which people spend their money across all spending levels, as the dollar amount spent increases, people are more likely to spend money on merchandise, services, and admissions. Only 25% of people who spend less than $20 in Riverhead, spend money on merchandise, whereas of those who spend $20-$50 and $50-$100, 45% and 44% respectively purchase merchandise while in Riverhead, and 59% of people who typically spend more than $100 in Riverhead report buying merchandise. Similarly, people are more likely to spend money on services if they spend more than $100 when in Riverhead than if they typically spend less than $50.

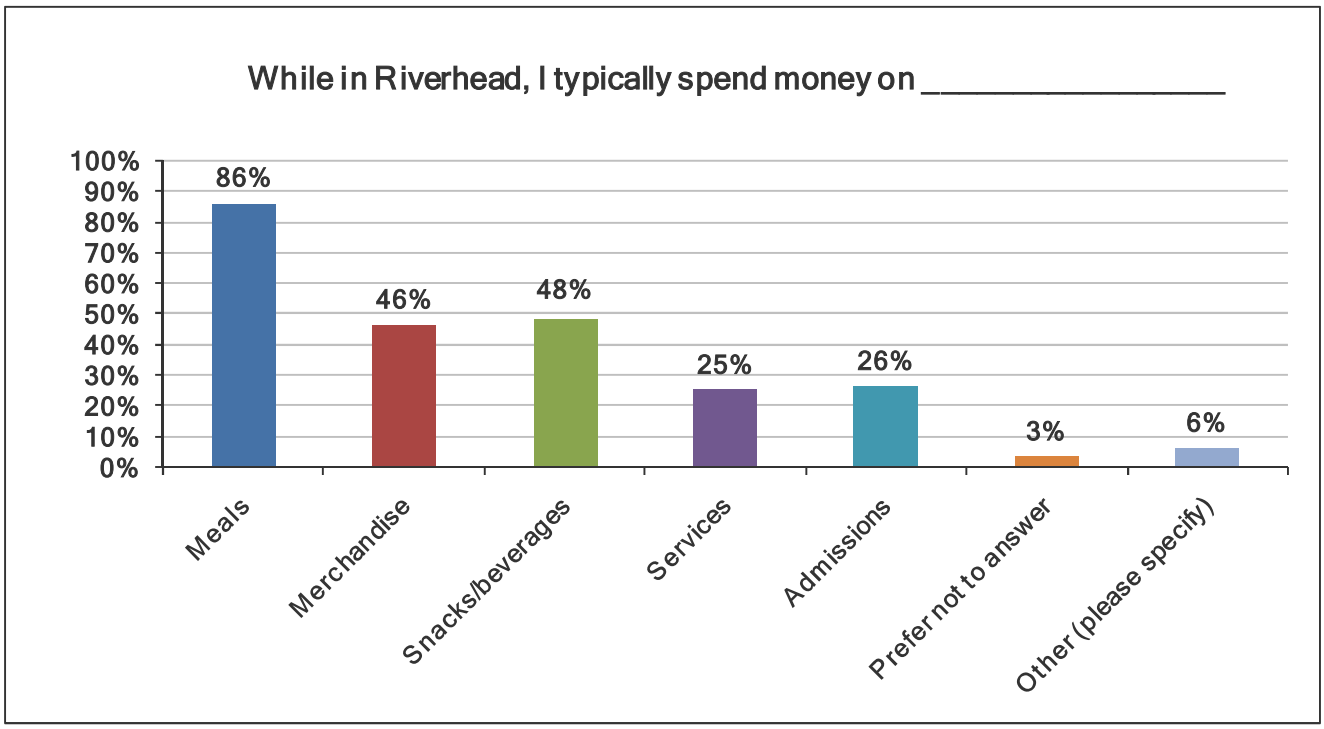


Figure 17. Categories of expenditures.

Table 2 Breakdown of expenditures in Riverhead by spending level.

Spending Level	**< $20** (N=51)	**$20-$50** (N=244)	**$50-$100** (N=206)	**$100 >** (N=114)
Category	***(Percentage of people in each level who spend money on the category of items)***			
Meals	65%	89%	91%	87%
Merchandise	25%	45%	44%	59%
Snacks & Beverages	39%	49%	46%	54%
Services	10%	19%	24%	41%
Admissions	6%	24%	33%	34%

Q12. I heard about this survey at/through _____.

Question 12 was designed to help the Project Team and Town of Riverhead understand effective ways of getting the word out about the survey and to inform future decisions about promoting projects and other Town-led efforts. The vast majority of respondents heard about the survey either through email, social media, or other online outlet. Roughly one-fifth heard about it through a newspaper, while the rest heard about it through a combination of smaller, more individualized outlets, such as schools or local businesses. This information also helps provide additional information about where respondents are likely to go or what they do in Riverhead.

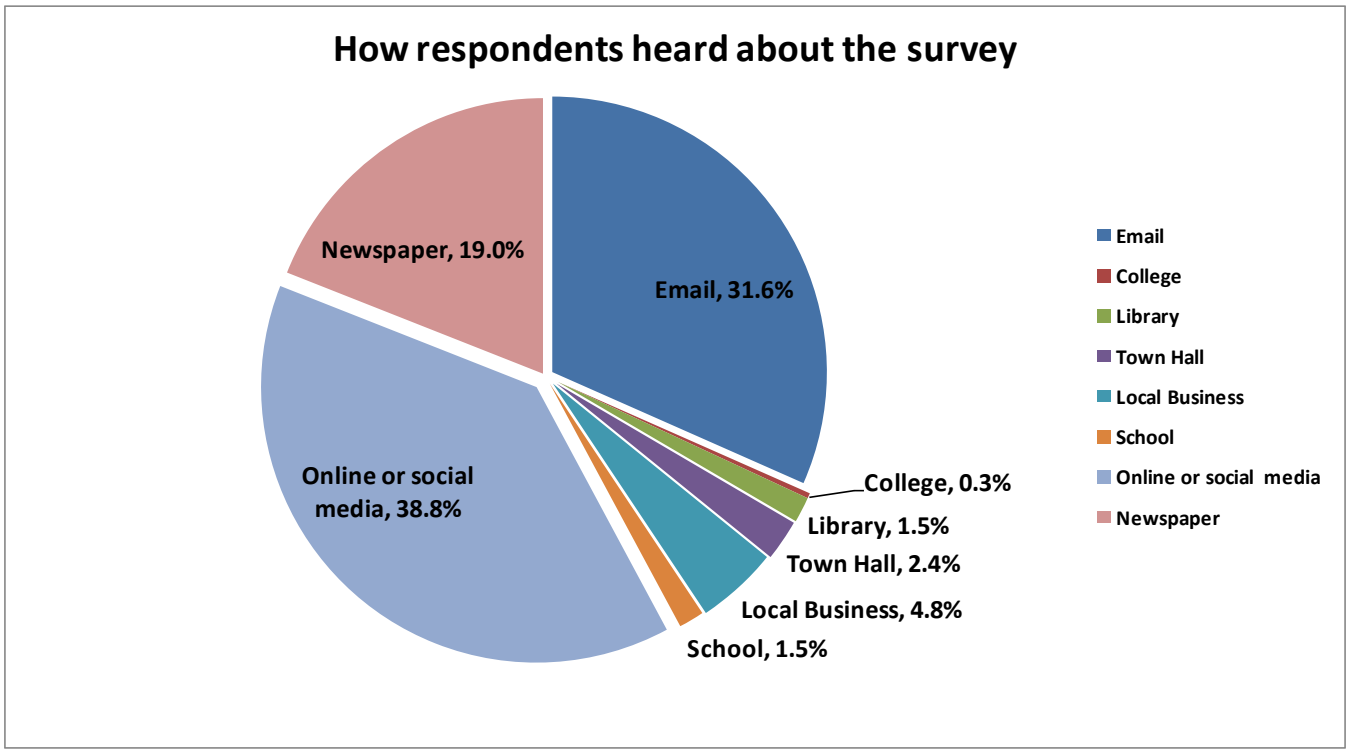


Figure 18. Survey outreach: How respondents heard about the survey.

Demographics Questions

Q13. What is your zip code? Or, if you're from another country, what is the name of your town and country?

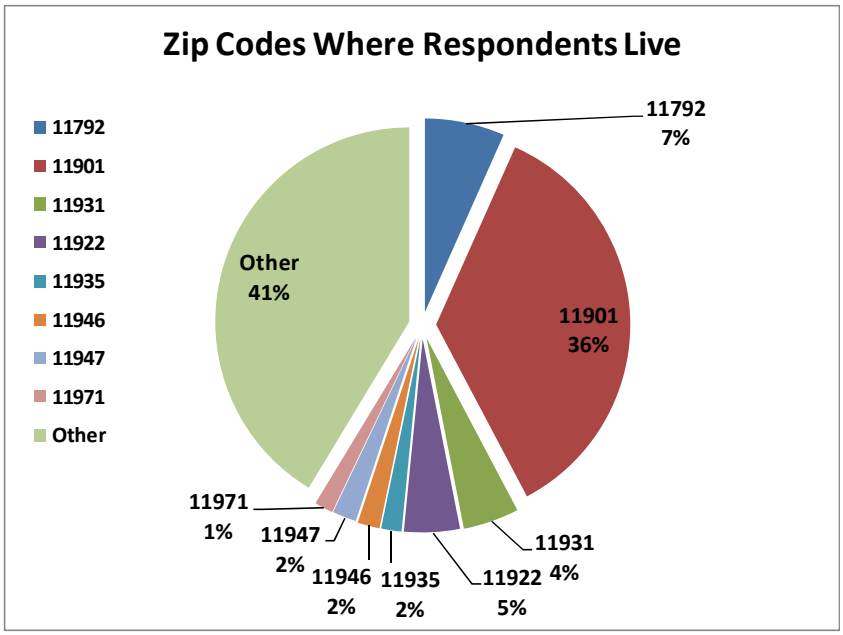


Figure 19. Respondent Zip Codes.

The 648 respondents who answered this question live in 113 different zip codes, including one respondent from Italy. The vast majority are from Long Island, and a substantial proportion are from the Riverhead area (see figure 20 right). 17 respondents live in zip codes not in Nassau or Suffolk County, and of those, ten are from outside New York State - as far away as Port St. Lucie, FL, Richmond, WA, and Los Angeles, CA. Six respondents indicated they have two residences

and provided two zip codes each; five of these have both homes in New York (one person did not provide zip codes, but only responded "summer resident").

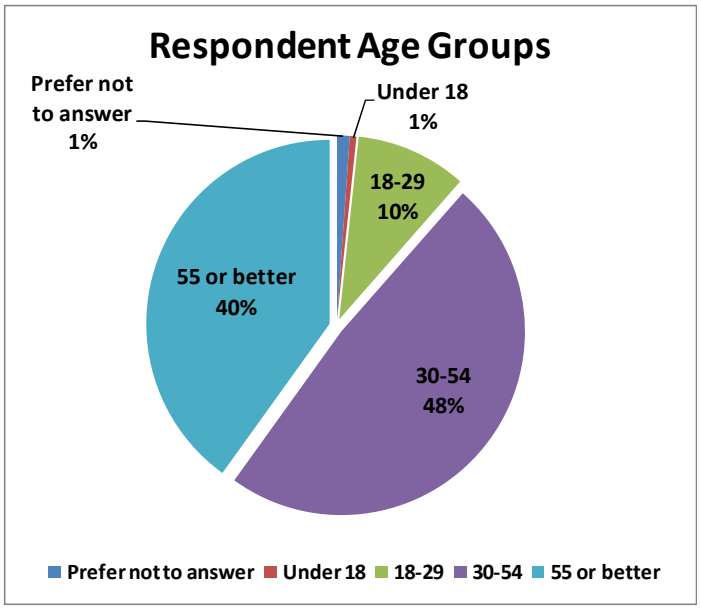
Table 3 Zip codes where respondents reside and percentage of total respondents in most frequent zip codes.

Most Frequent Zip Codes	Community	Percent of Total Respondents
11792	Wading River	6.6%
11901	Riverhead	35.6%
11931	Aquebogue	4.6%
11933	Calverton	10.8%
11935	Cutchogue	1.7%
11946	Hampton Bays	1.9%
11947	Jamesport	2.0%
11971	Southold	1.5%

At left is a list of the zip codes that were reported most frequently - by ten (10) or more respondents. It is interesting to note that all of these zip codes are located in Suffolk County. Percentages represent the percent of total responses (648) who live in that zip code (and includes both zip codes reported by dual residents).

Q14. What is your age group?

Question 14 asked participants about their ages. The vast majority of respondents are over 30. 30-54 represents the largest single age-group, while only a small proportion are young adults (18-29 years). Very few participants are under the age of 18.



Section 2: Intercept Survey Results

The "Intercept" survey was conducted in-person on a Sunday afternoon in October 2013, during the Riverhead Country Fair. The purpose was to try to capture data from people who come to Riverhead to attend events, whether from out-of-town or right in the area, as well as to encourage participation in the online survey. Overall 48 people were interviewed as part of the "Intercept" survey. Below is a summary of responses.

Q1. How often are you in Riverhead?

Of the 48 total respondents, one-third are in Riverhead every day, while about 35% are in Riverhead either once a week or once a month. Roughly 18% reported visiting only rarely or for the first time. A small proportion of respondents (13%) specified whether they visit on weekdays or weekends and the responses were split evenly.

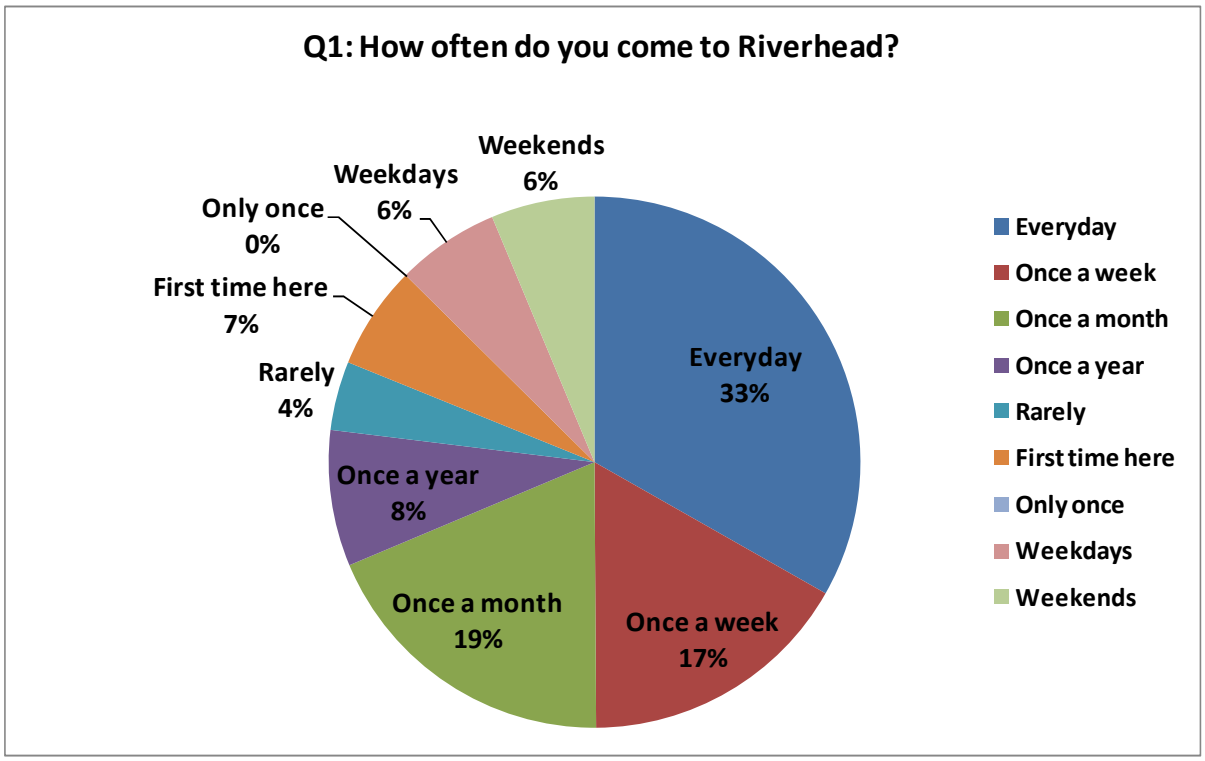


Figure 21. Time spent in Riverhead by Intercept Survey participants.

Q2. What do you do when in Riverhead?

40 people answered the second question about what they do while in Riverhead. The most common answers show that people mainly shop and eat in Riverhead. More than half of respondents report going out to eat in Riverhead. The third most common answer, given by one-third of respondents, was work or do business. Other common answers include socializing (27%) and walking along the river (17%).

Details provided by some respondents show that people come to Riverhead for boating, church, the breweries, the aquarium, events such as the Country Fair and car show, to shop at Tanger Outlets, and to run their businesses or visit family.

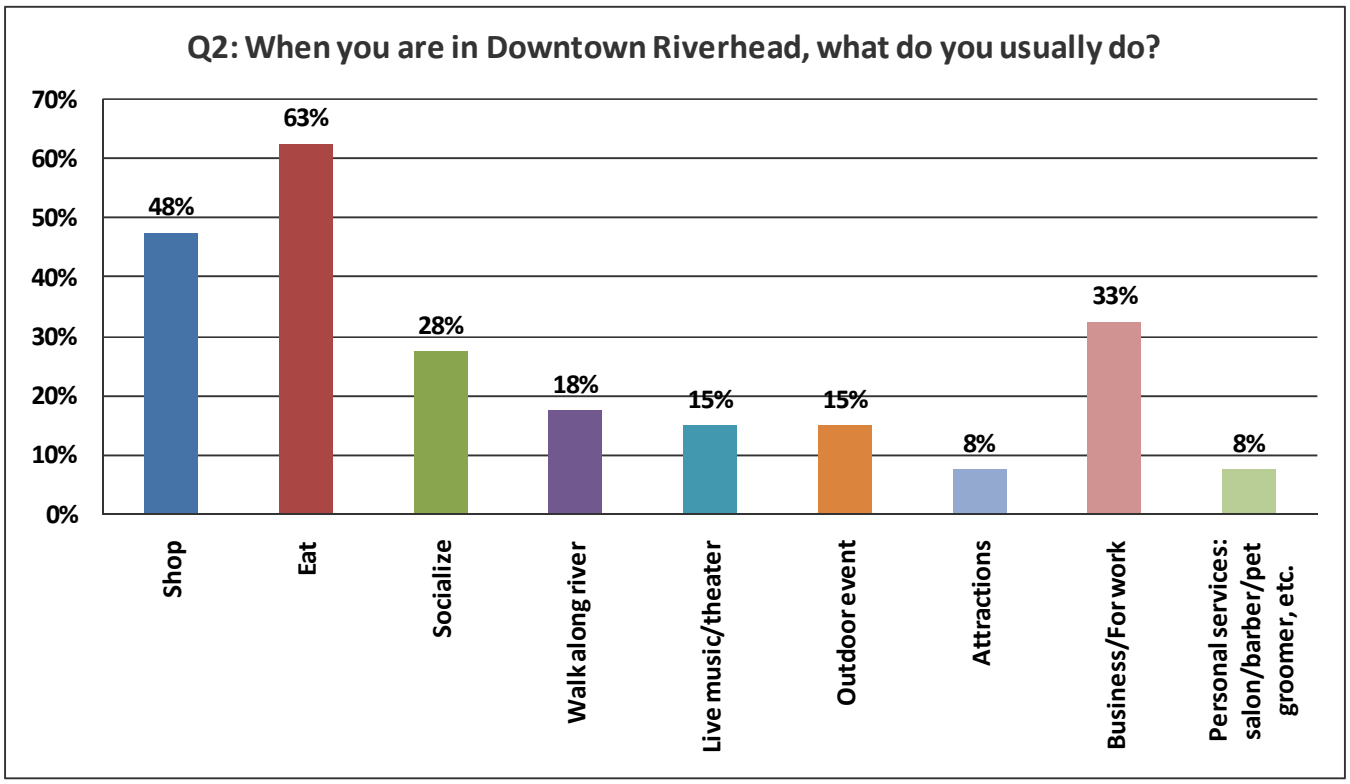


Figure 22. Preferred activities of Intercept Survey participants while in Riverhead.

Q3. What would your ideal Riverhead consist of?

The third question asked people to think about what types of amenities or activities they would like to see, how they would like Riverhead to look or how it could be improved. 34 people responded to this question providing a range of answers, including more restaurants, more entertainment, better access to the river, and more shops.

Additional suggestions offered by more than half of people who answered this question demonstrate a broad range of needs and desires for improvements to Riverhead. Six individuals commented that Riverhead is good as it is; they like how it is now or indicate that the Town and community have done a good job making improvements already. One respondent suggested that no more apartments are needed and the Town should wait to see what is here to stay. Other comments include:

- Coffee shop (x2)
    - With music
    - Starbucks
- Business incubator, technology, jobs
- Increased safety – more police presence, getting criminals off the streets

    - Better and safer parks
- Food store/grocery store (x2)
- Movie theater (x2)
- More events in Downtown (x3)
    - Craft fair
    - Concerts
- Nightlife (x2)
    - "Alive after 5"
    - Pubs and breweries
- River access should only be allowed during the day; better security should be provided at night
- Develop "other side" of river (Town of Southampton)
- Bulkhead in the harbor
- Free transportation
    - To access golf courses, Marina- 100 boats,

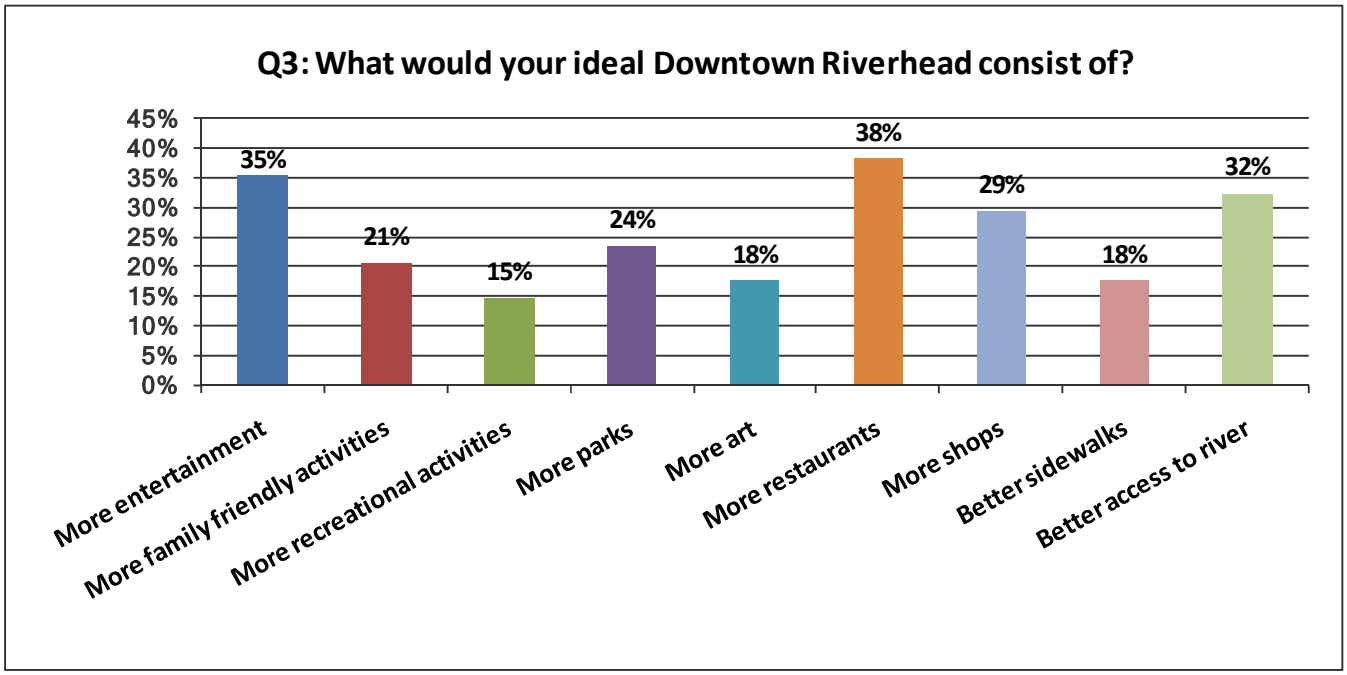


Figure 23. Desired activities and amenities in Riverhead.

Q4. What other towns do you like to visit and what do you like about them?

The fourth question asked people to indicate where else they like to go to visit and why. The purpose of this question was to understand what characteristics and features make other towns attractive and to generate ideas that Riverhead might consider. 41 people answered this question. Of those 41, Port Jefferson and Greenport were the most common responses, representing 17.7% and 12.9% respectively. Other common answers include Patchogue (8.1%) and Sayville (4.8%). 29 other answers were also given, ranging from Manhattan to Disney World.

Reasons why people are drawn to such places include taking advantage of the river, offering al fresco dining, the variety of shops and restaurants, having people walking around (feeling "alive and fun"), farmers' or craft markets, and arts and culture.

Q5. What is the zip code where you live?

Just under half of the respondents who answered this question are from the immediate Riverhead area, living in zip codes 11901 (Riverhead), 11933 (Calverton), or 11792 (Wading River). The highest proportion of respondents were from 11901 (23%), while 8% were from 11933 and 11792 each. The rest of the respondents were each from a different zip code, except two people from New Hyde Park (11040), and included two from outside of Long Island - from Connecticut and New Jersey.

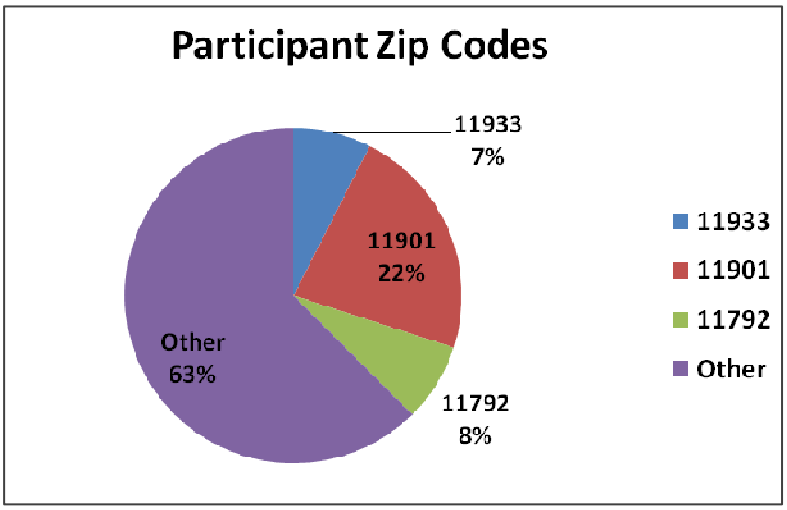


Figure 24. Zip codes where Intercept Survey participants live.

APPENDIX B

WSRR Community Designation Application

APPENDIX B-1

WSRR Community Designation 10/21/14

Town of Riverhead Submission to NYSDEC

TOWN OF RIVERHEAD

Sean M. Walter, Town Supervisor

200 Howell Avenue, Riverhead, NY 11901
Tel: (631) 727-3200 / Fax: (631) 727-6712
www.townofriverheadny.gov

October 21, 2014

RECEIVED
OCT 28 2014
NELSON & POPE

Joseph Martens, Commissioner
NYS Department of Environmental Conservation
625 Broadway
Albany, NY 12233-0001

Re: Peconic River WSRR
Application for Community Designation

Dear Commissioner Martens:

Please consider this letter as a formal request for a change in the Wild, Scenic and Recreational River designation for certain properties located along West Main Street in the Town of Riverhead from the current "Recreation" designation to "Community" designation as regulated by the New York State Department of Environmental Conservation (NYSDEC) under the Wild, Scenic and Recreation Rivers (WSRR) Act.

The Town of Riverhead has been working with Nelson, Pope & Voorhis LLC (NP&V) as consultant to the Town on the state funded Brownfield Opportunity Area (BOA) project and has identified the current WSRR regulation as one of the impediments to redevelopment along West Main Street. Further analysis and review of historic and existing conditions revealed that this area meets the minimum criteria set forth in 6 NYCRR Part 666.3(m) for the requested change in designation. Please consider this letter as an official request for the designation change which is detailed in the report prepared by NP&V, which is enclosed for your review and consideration.

The area identified for change in designation is located between the Long Island Expressway exit ramp to NYS Route 25 and the intersection of Mill Road and Route 25, and includes properties which are mostly developed for non-residential use. These properties are located mostly along the north side of either West Main Street or the Long Island Railroad (LIRR) and are facing major obstacles for redevelopment due to their existing non-conformity to WSRR regulations as a result of their "recreation" designation which only allows residential or river recreational use. It is anticipated that once the change in designation occurs, it will open opportunities for redevelopment and enhancement of these properties and will thus enhance the character of West Main Street.

This proposed change in designation would be consistent with the Town's long-term vision for West Main Street and the BOA study area. The designation change is expected to facilitate redevelopment opportunities for properties along north side of West Main Street while preserving the properties along the south side of West Main Street in order to: revitalize vacant and/or blighted properties, provide re-use opportunities that would allow for increased protection of the Peconic River, and enhance the overall character of the area.

Please note that we have been in discussion with the Region 1 Office regarding this matter and they are aware of the Town's intent to apply for this change in designation and have provided their input. We have taken the liberty of copying that office and NP&V to facilitate review. Thank you for your consideration of this request and please contact the undersigned should you have any questions.

Sincerely,

TOWN OF RIVERHEAD

Sean M. Walter
Town Supervisor

SMW:cas

Enclosure

cc: Peter Scully, NYSDEC Region 1 Director
Robert Marsh, NYSDEC, Freshwater Wetlands
Charles J. Voorhis, Nelson, Pope & Voorhis

TECHNICAL MEMORANDUM

SUBJECT: **DEC Wild, Scenic and Recreational River (WSRR) change in designation from "Recreation" to "Community"**

DATE: 9/16/2014

PREPARED BY: Mayank Kumar, AICP
Kathryn J. Eiseman, AICP
Charles J. Voorhis, CEP, AICP

1. **Introduction**: The Wild, Scenic and Recreation River (WSRR) Act is a statewide program which was created to protect rivers of the New York State and their immediate environment for the benefit and enjoyment of present and future generations. Many rivers of the State and their immediate environment possess outstanding natural, scenic, ecological, recreational, aesthetic, botanical, fish and wildlife, historical, cultural, archeological and scientific values. WSRR regulations include: management, protection, enhancement and control of land use and development in river areas on all designated wild, scenic, and recreational rivers in New York State. The act is regulated by the New York State Department of Environmental Conservation (DEC).

2. **Purpose**: A large portion of the Brownfield Opportunity Area (BOA) study area is within the boundary of the Peconic River WSRR corridor. The current stringent WSRR restrictions on development have been identified as a major obstacle to redevelopment within this portion of the BOA study area. The WSRR provides various classes of river designations including "Scenic," "Recreational" and "Community" river sections. While the existing "Recreational" designation effectively prohibits industrial, institutional, or commercial use, the "Community" designation (which is also protective of the river in appropriately applied areas) allows controlled industrial, institutional, or commercial use. This designation is more in keeping with existing land use and goals for the area. The WSRR provides minimum criteria which must be met for Community River designations. This memorandum examines these criteria and provides an analysis of the potential to change the designation from "Recreational" class to "Community" class, for certain properties located along the Long Island Railroad (LIRR) and/or along West Main Street in Riverhead between the east end of I-495 and Mill Road. This analysis is based on existing land use, property information available in GIS, review of historic aerials and historic land use, and a property record search through Town Assessor's Office.

3. **Background of DEC WSRR Regulation:** Article 15, Title 27 of the Environmental Conservation Law (ECL), known as the Wild, Scenic, and Recreational Rivers Act, was enacted in 1973. The Peconic River Recreational corridor was legislatively designated on July 23, 1987, and the final river corridor boundaries were set by Commissioner Decision and Order of September 1990. The Department adopted regulations (6 NYCRR Part 666) in June 1989 to implement ECL Title 27 which were revised in June 1994. Generally, 6 NYCRR Part 666 severely restricts or prohibits industrial, institutional, and commercial development within the designated river corridors. However, the regulations allow for areas within a recreational river corridor to be designated as a "Community." The "Community" designation provides some flexibility to allow for industrial, institutional, and commercial uses and development. The criteria for the designation of "Community" areas are enumerated in Section 666.3 (m) of Part 666:

> "Community" means an area of existing development delineated by DEC as part of the final boundary setting process that has a minimum of 30 acres and, at the time of legislative designation, a minimum of 85% of the lots developed. In addition, the area must have either lot sizes that average ½ acre or less or no less than 40% of the lots developed for industrial, institutional and/or commercial uses.

While the "Community" designation allows industrial, institutional, and commercial development, it also contains stringent requirements related to lot coverage, setbacks from the riverbank, lot size, screening from view of the river, wildlife corridors, water usage, groundwater protection and open space retention.

4. **Analysis and Findings:** As part of the BOA Step-II project analysis, the area east of I-495, generally located along West Main Street is under review and evaluation for future land development potential. Accordingly, all applicable regulations that would affect such development potential were reviewed and analyzed. It was found that a large number of parcels located along West Main Street are within the "Recreation" class designation under DEC WSRR regulations which allows only limited land uses such as residential, agricultural and river recreational uses. No commercial or retail use is permitted under the "Recreation" class designation unless such activity was pre-existing with the exception of following:

   a. Boathouses for boat storage or shelterage;
   b. Transient lodging facilities including campgrounds; and
   c. Retail or rental facilities directly associated with river recreation with 10% or less lot coverage on 3 or more acres;

The existing WSRR designations are mapped based upon the GIS layer provided by the NYSDEC (see **Attachment A**); this map illustrates that the boundary of the Recreation designation extends almost halfway to CR-58 (Old Country Road), and almost 1,600 feet north of the LIRR. There are number of developed commercial and industrial properties located within the Recreation designated area including Tanger Outlet Mall, Fairfield Pines garden apartments, Dynamic Automotive (auto repair shop), the Former 84 Lumber, Auto Lab, Riverhead Scrap Metal and Parts, Basso Motors (construction equipment rentals), Greenview Inn, Northfork Plumbing and Heating Supply Corp. and McKenna's (auto repair use). Most of these developed properties are

located north of West Main Street and are clearly separated from the river by either the LIRR or West Main Street. The Recreation designation restricts the existing commercially developed properties such that they have little or no flexibility to make changes/modifications to their property to meet the changing market demands. Therefore, the continuation of the Recreation designation will have adverse effects on the potential revitalization of this area since non-conforming pre-existing uses have limited ability to redevelop into more viable uses.

As part of the BOA analysis, an area was defined for a change in designation to Community and tested to determine if it would meet the basic criteria as outlined in the WSRR regulations (see **Attachment B**), which are as follows:

a. Total area: 30 acres minimum
b. Total number of developed lots (prior to 1987 legislative designation): 85% minimum
c. Average lot size or non-residential developed parcels:
    i. Average lot size: ½ acre minimum;
        OR
    ii. Lot developed for industrial, institutional, and/or commercial uses: 40% minimum

It is noted that the WSRR boundaries do not necessarily follow tax parcel lines and in cases where a parcel is partially within the WSRR, only that portion of the parcel is included in the calculations.

The area selection process involved careful review of existing parcel composition and land use. The results are summarized in the analysis table included on the map included in **Attachment B** and individual property record information including historic land use is provided in table form in **Attachment C**. The criteria for an average lot size of ½ acre was not used since it was determined through GIS analysis of parcel acreages that the average acreage of the properties located along West Main Street is much larger than ½ acre. Therefore, the criteria used to meet the requirements of item c above was for 40% of lots developed with non-residential use as most properties located along West Main Street have long been developed with some type of industrial or commercial use.

The analysis table depicted on the map included in **Attachment B** indicates that the selected area qualifies for the change in designation. The analysis revealed that 85.9% of the parcels proposed for the change in designation were developed prior to 1987 (85% minimum required), and 57.9% of this area is developed with non-residential uses (40% minimum required). Additionally, 28.1% of the parcels are developed as residential (60% maximum permitted). The right-of-way of the LIRR and the right-of-way of West Main Street are considered as separate parcels in order to form the contiguous composition of the proposed Community designation. This approach is in keeping with the previous Community designation for other parcels along West Main Street which was approved by the NYSDEC in January 2010[1].

[1] See Commissioner of NYSDEC's Decision and Order in the Matter of the Proposed "Community" Designations for Two Locations Within the Recreational Segment of the Peconic River Corridor, in Suffolk County, New York, Within the Wild, Scenic and Recreational Rivers System Pursuant to Article 15, Title 27 of the Environmental Conservation Law (ECL) and

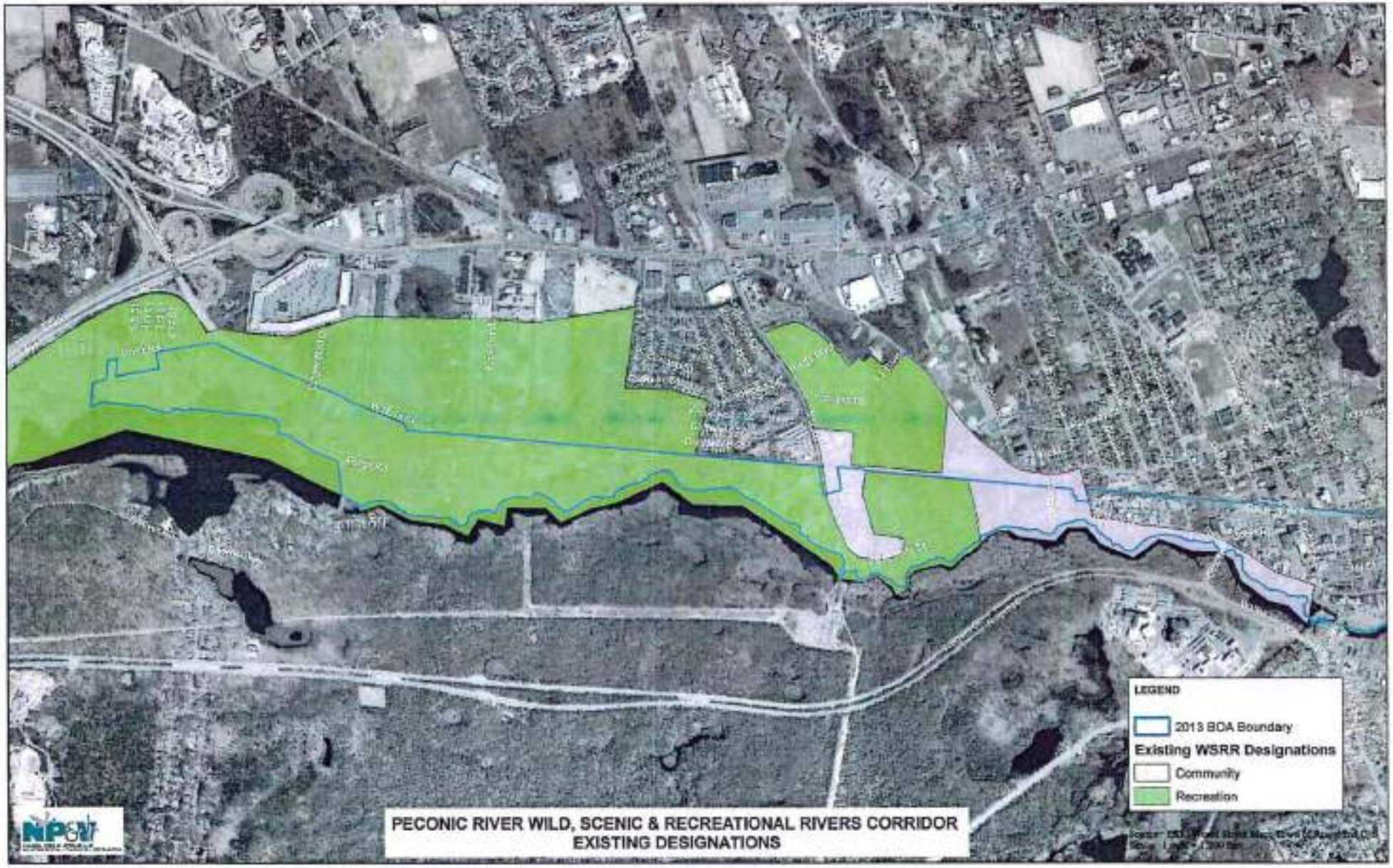
The recommended Community designation involves a total of 57 parcels including one (1) parcel of LIRR ROW and two (2) parcels of West Main Street ROW. Thirty eight (38) of the parcels are located either north of West Main Street or north of the LIRR right-of-way and have been mostly developed since prior to 1987. Sixteen (16) parcels are located along the south side of West Main Street at the Mill Road intersection (site numbers 39 to 54). Apart from several existing residential homes and a restaurant, there are existing non-conforming uses at the corner of West Main Street and Mill Road which include auto repair uses and an outdoor storage/contractor yard.

As part of the BOA study, this location (site numbers 45 to 54) has been identified as a gateway to Downtown Riverhead with opportunities to be redeveloped in a coordinated fashion, also known as "Peconic Overlook". A potential redevelopment concept has been prepared and is illustrated in the conceptual sketch provided in **Attachment D**. It is noted that the coordinated redevelopment of this area could also include some or all of the properties to the west along West Main Street (site numbers 39 to 44). The concept sketch considers consolidation of ten parcels and a coordinated redevelopment which takes into consideration the surrounding restaurants, ice cream shop, and existing residential uses to provide a cohesive development which will not only attract tourists but also improve the existing land use in the context of the Peconic River shorefront location, improve water quality, aesthetics, and the overall environment of this area. Some of the features of the plan include a green infrastructure stormwater management feature which will aid in the improvement of stormwater runoff entering the river, a river walk, reuse of existing foundations where feasible, and an area for replanting and revegetation.

Based on this analysis, there appears to be a valid basis to support a change in designation of the area identified herein from "Recreation" to "Community" and if successful will assist property owners in overcoming one of the obstacles to redevelopment in this portion of the BOA.

Part 666 of Title 6 of the Official Compilation of Codes, Rules and Regulations of the State of New York (6 NYCRR), by the Town of Riverhead, Suffolk County, and the County of Suffolk, New York.

ATTACHMENT A
(DEC WSRR -
Existing Designation Map)



PECONIC RIVER WILD, SCENIC & RECREATIONAL RIVERS CORRIDOR
EXISTING DESIGNATIONS

ATTACHMENT B

(DEC WSRR – Analysis of area selected for change in designation from "Recreation to "Community")

PECONIC RIVER WILD, SCENIC & RECREATIONAL RIVERS CORRIDOR
EXISTING WSRR DESIGNATIONS WITH PROPOSED COMMMUNITY PARCELS

ANALYSIS TABLE

Parameters	Proposed	Required/Allowed
1. Number of Parcels:	57	N/A
2. Total area of delineation*	156.9 Acres	30 Acres minimum
3. Total developed prior to 1987**	49 (85.9%)	85% minimum
a. No. of developed (non-residential)***	33 (57.9%)	40% minimum
b. No. of developed (residential)	16 (28.1%)	60% maximum
4. Existing vacant	4	N/A
5. Total developed after 1987	4	N/A

*Area of delineation includes only the area within the WSRR designation not the entire parcel area.

**Information pertaining to historic land use of individual parcels is provided by Town Assessor and supplemented by review of historic aerials from 1984 and 1994 to confirm if the property was developed prior to adoption of "Recreation" class designation by DEC in July 1987.

***Properties not called out in the map are considered to be developed for non-residential use prior to 1987.

ATTACHMENT C
(Property Data Collection Sheet)

Property Data Collection

WSRR Change in Designation

Site ID	Parcel ID	Parcel Area (Acres)	Parcel Area within WSRR (Acres)	Owner First Name	Owner Last Name	Address	Current Land Use	Developed Prior to 1987	General Notes
1	060011800400009001	1.55	1.55	EDWARD	DENISESKI		Commercial	YES - 1970	
2	060011800100002002	4.13	2.75		326 SEVENTH STREET ASSOCIATES INC	1821 MIDDLE COUNTRY RD	Vacant	Vacant	
3	060011800100003000	4.10	4.10		WEISSMAN 356 LLC	W MAIN ST CALV	Commercial	YES - 1947	
4	060011800100004000	47.64	14.18	HOWARD T	HOGAN JR	200 TANGER MALL DR	Commercial	Developed after 1987	Tanger Outlet Mall
5	060011800100008000	4.82	4.82		100 NORTH BROADWAY ASSOCIATES	1750 ROUTE 25	Commercial	YES - 1965	
6	060011800400010000	5.52	5.52		SPIRIT SPE PORTFOLIO 2007 2 LLC	WEST MAIN ST	Commercial	YES - 1984	Former 87 Lumber
7	060011800400011000	0.84	0.84	GEORGE	KALAMARAS	W MAIN ST CALV	Commercial	YES - 1948	
8	060011900100005005	2.44	1.57		KROEMER AVENUE CORP		Commercial	YES - 1959	
9	060011900100005003	9.36	9.36		KROEMER AVENUE ASSOCIATES INC	31 KROEMER AVE	Commercial	YES - 1962	
10	060011900100008007	6.08	6.07		KROEMER AVENUE HOLDINGS LLC	44 KROEMER AVE	Commercial	Developed after 1987	
11	060011900100005000	3.26	3.26		NICOLIAS LTD	KROMER AVE	Commercial	YES - 1948	
12	060011900100000000	1.53	1.53	JOSEPH W	MAVELLIA	KROMER AVE CAL	Commercial	YES - 1959	
13	060011900100002001	3.98	3.98	MILDRED U	COWAN	KROEMER AVE	Commercial	YES - 1948	
14	060011900100002002	3.07	3.07		KROEMER AVENUE ASSOCIATES LLC	46 KROEMER AVE	Commercial	YES - 1981	
15	060011900100001002	1.90	1.90		PARACO GAS CORP	KROMER AVE	Commercial	YES - 1948	
16	060011900100005000	6.70	6.15		LONG ISLAND LIGHTING CO	S OF ROUTE 58	Institutional - ROW	YES	Overhead Utility
17	060011900100004000	24.86	15.98		WORLD LIFE ENTERTAINMENT INC	OLD COUNTRY RD	Commercial	YES - 1948	
18	060011900200001000	0.53	0.53	ALISON	HO	1581 MAIN ST	Vacant	Vacant	
19	060011900200002000	0.08	0.08	WALTER	SEMASCHUK	W MAIN ST CALV	Institutional	YES	Overhead Utility
20	060011900200004001	1.66	1.66		WR GELATERIA INCORPORATED	1556 MAIN ST	Commercial	YES - 1956	
21	060011900200005000	0.43	0.43		LONG ISLAND LIGHTING CO	W MAIN ST CALV	Institutional - ROW	YES	Overhead Utility
22	060011900200007001	3.61	3.61		KROEMER RTE 25 LLC	WEST MAIN ST	Commercial	Developed after 1987	
23	060011900200008000	0.22	0.22		COUNTY OF SUFFOLK	WEST MAIN ST	Vacant	Vacant	
24	060011900200010001	0.42	0.42	LUSI	NENUVAR	1446 WEST MAIN ST	Residential	YES - 1945	
25	060011900200011000	0.28	0.28	ELIZABETH	DANOWSKI	W MAIN ST	Residential	YES - 1950	
26	060011900200012000	0.64	0.64		RJT REALTY ASSOCIATES	1402 WEST MAIN ST	Commercial	YES - 1935	
27	060011900200013000	0.48	0.48		LORMAN REALTY ASSOCIATES	W MAIN ST	Commercial	YES - 1956	
28	060011900200014000	0.28	0.28	GEORGE J	NUNNARD	W MAIN ST	Commercial	Developed after 1987	
29	060011900200015000	0.13	0.13	GEORGE J	NUNNARD	W MAIN ST	Residential	YES - 1945	
30	060011900200016000	0.55	0.55		1396 WEST MAIN STREET LLC	1396 W MAIN ST	Commercial	YES - 1929	
31	060011900200017001	21.09	21.09	JANE	WANAT	1378 MAIN ST	Commercial	YES	Horse Farm
32	060011900200017000	0.37	0.37	JOHN	WANAT	1368 MAIN ST	Commercial	YES - 1957	
33	060011900200018000	0.37	0.37	DOROTHY A	SHORE	W MAIN ST	Residential	YES - 1965	
34	060011900200019000	0.18	0.18	THOMAS J	ORLINGER	WEST MAIN ST	Vacant	Vacant	
35	060011900200020000	0.86	0.86	STANLEY	POLLACK	1288 WEST MAIN ST	Residential	YES - 1929	
36	060012000100301000	0.52	0.52	MARY	WILLIAMS	1238 MAIN ST	Residential	YES - 1900	
37	060012000100302000	1.13	1.13		CORNERSTONE PROPANE L P	WEST MAIN ST	Commercial	YES - 1955	
38	060012000100301000	0.98	0.98		DAW REALTY OF RIVERHEAD INC	WEST MAIN ST	Commercial	YES - 1940	
39	060011900200027000	1.16	1.16	KAREN	MEICH	1241 WEST MAIN ST	Residential	YES	
40	060011900200026001	0.40	0.40	HELEN D	COZINE	1231 W MAIN ST	Residential	YES	
41	060011900200026000	0.63	0.63	BRIAN	LEWIN	1225 W MAIN ST	Residential	YES	
42	060011900200025000	0.75	0.75		MIL WAR INC	WEST MAIN ST	Residential	YES	
43	060011900200024000	0.64	0.64	MICHELE	MULRENAN	1215 MAIN ST	Residential	YES	
44	060011900200023000	0.37	0.37	RICHARD	SCOTT	1217 WEST MAIN ST	Residential	YES	
45	060011900200022000	0.78	0.78	ROY T	OSMAN	1205 W MAIN ST	Commercial	YES - 1972	
46	060011900200021000	0.21	0.21	SALLY M	OSMAN	1205 W MAIN ST	Residential	YES - 1927	
47	060012500200020000	0.35	0.35	BERTHA	PFLEIDER	W MAIN ST	Residential	YES - 1930	
48	060012500200025001	0.37	0.37	ROY T	OSMAN		Residential	YES - 1930	
49	060012500200025002	0.98	0.98	ROY T	OSMAN		Commercial	YES - 1938	
50	060012500200027002	0.32	0.32		ZBA HOLDINGS INC	1159 WEST MAIN ST	Residential	YES - 1976	
51	060012500200027003	1.37	1.37	ROY	OSMAN	WEST MAIN ST	Commercial	YES - 1966	
52	060012500200027005	0.29	0.29		DEV 2004 INC	1159 WEST MAIN ST	Commercial	YES - 1965	
53	060012500200026002	0.40	0.40	DAVID LEE	FULTON	OFF W MAIN ST	Commercial	YES - 1958	
54	060012500200028000	0.89	0.89	MATTHEW	ALFARO	WEST MAIN ST	Commercial	YES - 1966	
55	No Tax Parcel	8.44	8.37		MTA LIRR		Institutional	YES	
56	No Tax Parcel	13.86	13.86				Institutional	YES	
57	No Tax Parcel	6.83	6.83				Institutional	YES	

Items highlighted in blue are apparent in the 1984 aerial photograph

Items highlighted in green are based on information received from Town Assessors Office

ATTACHMENT D
(Conceptual Sketch of Redevelopment at Peconic Overlook)

DEC WSRR "COMMUNITY" Regs:
Max. Lot Coverage: 10%
Min. Setback from public road: 100'
Max. Height: 34'

Zoning Regs (PRC District):
Min. Lot Area: 80,000 SF
Max. Building Coverage: 20%
Max. Impervious: 40%
Max. Building Height: 34'
Max. FAR: 0.40
Min. Front Yard: 25'
Min. Side Yard: 15' each/ 30' combined
Min. Rear Yard: 50'

Peconic Overlook Sketch:
Current Zoning: RFC (Riverfront Corridor)
Lot Area: Overall approx. 60,000 SF
Building Coverage: Approx. 40%
FAR: Approx. 0.4
Impervious Coverage: Approx. 50%

Various zoning relief and/or a new overlay district, and/or WSRR variance may be required.

Sustainable development incorporating LEED building design features and green infrastructure is recommended.

PECONIC OVERLOOK

RIVER ORIENTED RECREATION (MILL ROAD & W. MAIN STREET)

APPENDIX B-2

WSRR Community Designation April 2016

Town of Riverhead Submission to NYSDEC

TOWN OF RIVERHEAD

Sean M. Walter, Town Supervisor

200 Howell Avenue, Riverhead, NY 11901
Tel: (631) 727-3200 / Fax: (631) 727-6712
www.townofriverheadny.gov

April 15, 2016

Basil Seggos, Commissioner
NYS Department of Environmental Conservation
625 Broadway
Albany, NY 12233-0001

Re: Peconic River WSRR
Application for Community Designation

Dear Commissioner Seggos:

Please consider this letter as a formal request for a modification to our initial application for a change of designation of a portion of the Peconic River Wild Scenic and Recreational River (WSRR) from Recreational to Community in downtown Riverhead. The original application was submitted on October 21, 2014, and included 57 parcels located on the north and south sides of West Main Street, between River Road and Mill Road. The current application has been modified to include 51 parcels along West Main Street between Tanger Mall Drive and Mill Road.

Subsequent to our initial submission, comments were received from NYSDEC staff (Roy Jacobson Jr., DEC Central Office and Rob Marsh, Region 1) regarding concerns of the change in designation of parcels located west of Tanger Mall Drive. Both Central Office and Region 1 staff discussed their concerns regarding the more natural character of these parcels and the potential impact of potential commercial, industrial of institutional development on these sites which the Community designation would allow. Additionally, concerns were expressed regarding the inclusion of the natural portion of the parcel owned by Riverhead Raceway, and the horse farm located on the north side of the railroad tracks, west of Deepwood Street, as development of these parcels with commercial, industrial or institutional uses could negatively affect the character of the river corridor.

The Town has reviewed the NYSDEC's concerns and accepts that these parcels are not appropriate for inclusion within the Community designation for the reasons described above. As a result, the current application has been modified to exclude the areas of concern. It is the Town's belief that this modification will allow for continued protection of the river while promoting the Town's long term vision for this area, which includes redevelopment of sites that are currently poorly suited to the area and improperly sited within the lot. As such, the Town respectfully requests the NYSDEC consider the modified application and grant the change in designation of this area from Recreational to Community.

Thank you for your consideration of this request and please contact the undersigned should you have any questions.

Sincerely,
TOWN OF RIVERHEAD

Sean M. Walter
Town Supervisor

Enc.

cc: Roy Jacobson Jr., NYSDEC
Carrie Meek-Gallagher, NYSDEC Region 1 Director
Robert Marsh, NYSDEC, Freshwater Wetlands
Charles J. Voorhis, Nelson, Pope & Voorhis

TECHNICAL MEMORANDUM

SUBJECT: **DEC Wild, Scenic and Recreational River (WSRR) change in designation from "Recreation" to "Community" – Revised Application**

DATE: April 11, 2016

PREPARED BY: Lara Urbat, Certified Ecologist, ESA
Kathryn J. Eiseman, AICP
Charles J. Voorhis, CEP, AICP

1. **Introduction**: On October 21, 2014, an application was submitted to the NYSDEC for a change of designation from "Recreational" to "Community" for an area west of Downtown Riverhead, along West Main Street. A copy of the original text portion of that application is provided as **Attachment A**. Subsequent to the submission, discussions were held with NYSDEC Albany staff (Roy A. Jacobson Jr.) regarding suggested modifications to the area to be designated on March 3, 2016 and March 7, 2016. This application includes a revised area for Community designation which has been modified based on the above referenced discussions, which represents an area that DEC staff from Albany and Region 1 can support for change in designation to Community. Supporting documentation are provided in greater detail below and in the attachments to this memorandum. For reference, the current WSRR boundary map for the area is provided in **Attachment B**.

2. **Revised Analysis**: In review of the original parcels designated for a change to Community with the NYSDEC, several parcels of concern were eliminated from the proposed designation and a revised area was defined and tested to determine if it would meet the basic criteria as outlined in the WSRR regulations (see **Attachment C**), which are as follows:

    a. Total area: 30 acres minimum
    b. Total number of developed lots (prior to 1987 legislative designation): 85% minimum
    c. Average lot size or non-residential developed parcels:
        i. Average lot size: ½ acre minimum;
            OR
        ii. Lot developed for industrial, institutional, and/or commercial uses: 40% minimum

    It is noted that the WSRR boundaries do not necessarily follow tax parcel lines and in cases where a parcel is partially within the WSRR, only that portion of the parcel is included in the calculations. The modified boundary is consistent with the criteria in that it is 101.61 acres, 88.24% of which were developed prior to 1987 (85% minimum) and 64.44% of the lots were developed for

industrial, institutional or commercial uses. The criteria for an average lot size of ½ acre was not used since it was determined through GIS analysis of parcel acreages that the average acreage of the properties located along West Main Street is much larger than ½ acre. Therefore, the criteria used to meet the requirements of item c above was for 40% of lots developed with non-residential use as most properties located along West Main Street have long been developed with some type of industrial or commercial use. The right-of-way of the LIRR and the right-of-way of West Main Street are considered as separate parcels in order to form the contiguous composition of the proposed Community designation. This approach is in keeping with the previous Community designation for other parcels along West Main Street which was approved by the NYSDEC in January 2010[1]. An analysis of this boundary for conformance with the Community designation criteria is also summarized in the analysis table included on the map provided in **Attachment C.**

The recommended Community designation involves a total of 51 parcels including one (1) parcel of LIRR ROW and one (1) parcel of West Main Street ROW. Thirty-three (33) of the parcels are located either north of West Main Street or north of the LIRR right-of-way and have been mostly developed since prior to 1987. Sixteen (16) parcels are located along the south side of West Main Street at the Mill Road intersection (site numbers 34 to 49). Apart from several existing residential homes and a restaurant, there are existing non-conforming uses at the corner of West Main Street and Mill Road which include auto repair uses and an outdoor storage/contractor yard. A description of the proposed Community boundary is provided in **Attachment D.** Individual property record information including historic land use is provided in table form in **Attachment E**.

The Community Rivers designation is anticipated to assist with both the revitalization of West Main Street (which is sorely in need of revitalization and is the subject of the BOA), as well as the environmental and ecological improvement of strategic properties along the Peconic River in a manner that betters serves the overall goals of the Wild, Scenic and Recreational Rivers Act. Under current conditions, there are existing auto-related uses, retail business and residential uses in the area described as Peconic Overlook in the BOA Step II Nomination Study[2]. This area and an area immediately to the west which includes residential uses are proposed to be included in the new Community Rivers designation area. This cluster of development represents adverse legacy uses that do not promote ecological value or environmental protection for the following reasons:

- Impervious surfaces and lawn areas with little or no drainage that flow to the Peconic River by conveyance, inadequate containment or overland flow;
- Auto-related uses with chemical use and storage that represents a potential and actual threat to water quality of the Peconic River;

[1] See Commissioner of NYSDEC's Decision and Order in the Matter of the Proposed "Community" Designations for Two Locations Within the Recreational Segment of the Peconic River Corridor, in Suffolk County, New York, Within the Wild, Scenic and Recreational Rivers System Pursuant to Article 15, Title 27 of the Environmental Conservation Law (ECL) and Part 666 of Title 6 of the Official Compilation of Codes, Rules and Regulations of the State of New York (6 NYCRR), by the Town of Riverhead, Suffolk County, and the County of Suffolk, New York.
[2] Described in the original application to the DEC

- Potential for erosion and sedimentation to the Peconic River due to instability and channelized flow;
- Small lots that exceed SCDHS density limitations under Article 6 of the SCSC; and
- Non-native landscape and/or invasive vegetation in proximity to the River that lacks habitat value, stormwater filtration benefit, aesthetic value and shoreline stabilization qualities.

There is no incentive for the current condition as described above, to change. To the contrary, there is a disincentive to improving these properties as has been evidenced by the persistence of these long-term existing detrimental conditions.

The proposed Community Rivers designation is intended to promote redevelopment by allowing controlled commercial use as envisioned by this designation. The new designation would still have significant safeguards in effect as required under the WSRR. The added benefit is that there is more of an incentive to redevelopment these properties in a way that will stimulate revitalization, and improve water quality, habitat and aesthetics through mitigation that would be designed as sites are proposed for re-use. Site plan review of future redevelopment projects would consider vegetated buffers along the river, upland stormwater containment, removal of auto-related uses and replacement with more compatible uses, reduction in fertilizer dependent vegetation, proper sanitary handling (either off site treatment, on-site treatment or properly functioning conventional systems), reduction of impervious surfaces and overall improvements aesthetics, landscaping and themed use in conformance with BOA goals and on-site best management practices. This better serves the Peconic River and the overall WSRR and the Town of Riverhead by removing impediment appropriate development/redevelopment in a manner that is consistent with the goals of the BOA.

Consideration was also given to the three criteria evaluated in the NYSDEC's decision on the 2010 application. Each criteria and appropriate analysis is provided below.

Q1. Does the proposal meet the standards contained in 6 NYCRR §666.3?

The standards contained in 6 NYCRR §666.3 are outlined above. As demonstrated in **Attachment D** which is based on Town Tax Assessor and Building Permit records and historic aerial photographs, 88.24% of the area was developed prior to 1987, thus satisfying the 85% minimum criteria. As previously indicated, the ½ acre criteria was not utilized as the average lot size for the area is larger than ½ acre. As a result, the criteria requiring a minimum of 40% of the area to be developed with industrial, institutional and/or commercial uses was utilized; 64.44% of the area was developed with such uses, thus satisfying this criterion. As a result, the proposed designation meets the criteria established in the regulations.

Q2. If not, is there an alternative proposal that does meet the standards contained in 6 NYCRR §666.3?

This does not apply as the proposed change in designation meets the standards contained in 6 NYCRR §666.3.

Q3. Should the Department designate a specific area as a "Community?"

While this criteria is ultimately up to the review and analysis conducted by the NYSDEC, it is the Town's belief that this area warrants a change to the Community designation. Very few vacant lots exist within the area, and the majority are currently comprised of developed land (99.08%). In the case of Parcel 13, which is currently developed as the Riverhead Raceway, only the northern portion of the lot is included in the proposed Community designation area as the southern portion remains largely naturally vegetated and development of this area for commercial, institutional or industrial use would not be in keeping with the intent of the WSRR regulations. The three vacant lots included in the proposed Community designation area represent less than one acre of area that could be modified; changes to such a small area are not anticipated to impact the river a development of these lots would still be required to meet the criteria for development as outline in 6 NYCRR §666. Many of the existing uses are situated on lots with no shoreline buffers, aged drainage and/or sanitary infrastructure, and aged buildings. The change in designation of the parcels included in this application would promote the cohesive and beneficial redevelopment of existing non-conforming or poorly sited uses. River protection would be enhanced through redevelopment as increased buffers would be required, and modern drainage and sanitary infrastructure would be required on each site. Stringent lot coverage and setback requirements would also be in place to reduce impervious surfaces in proximity to the river. As a result, it is the Town's opinion that the change in designation would result in a net benefit to the river, and requests the Department's concurrence.

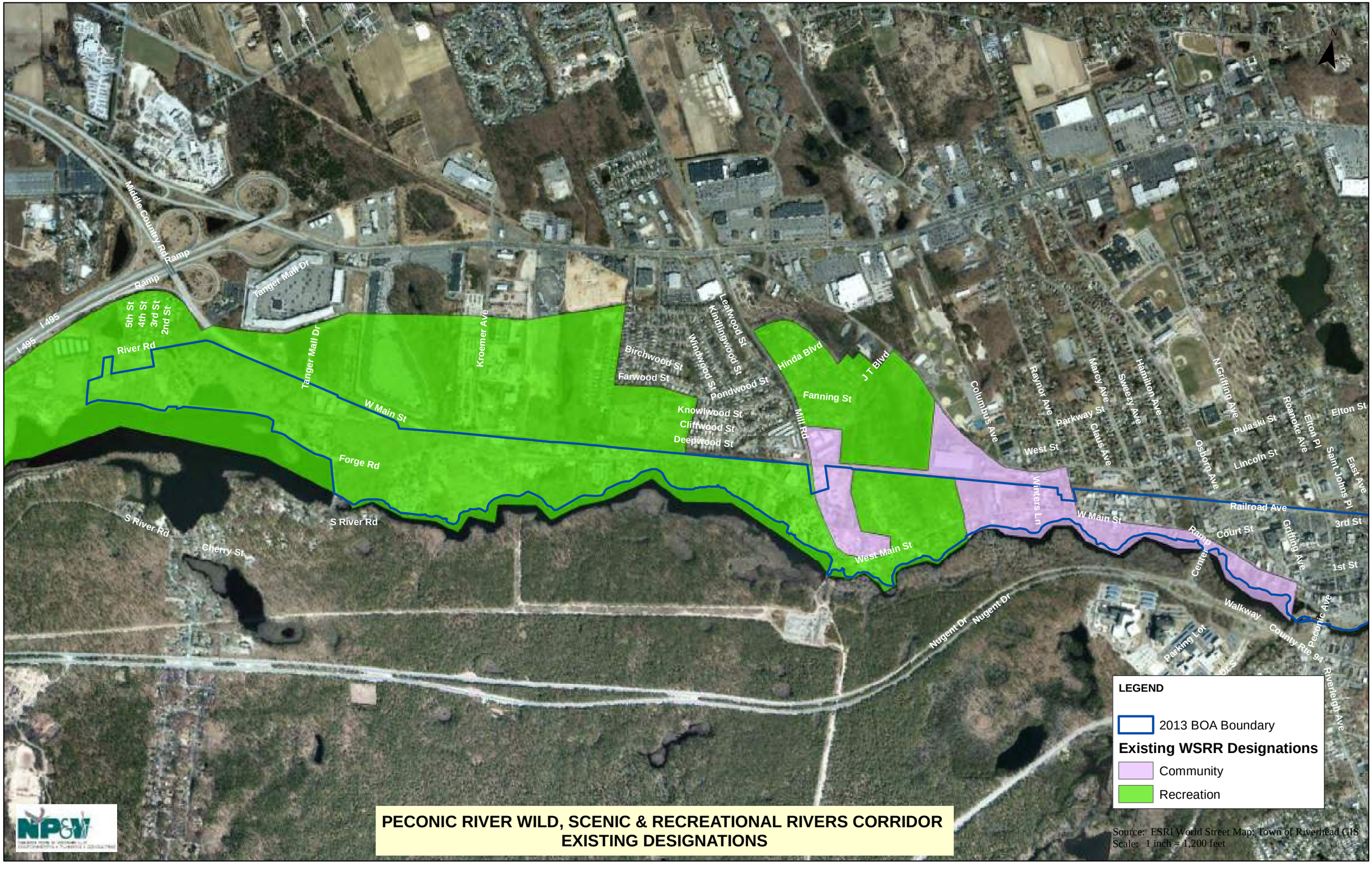
Based on this analysis, there is a valid basis to support a change in designation of the area identified herein from "Recreation" to "Community" and if successful will assist property owners in overcoming one of the obstacles to redevelopment in this portion of the Brownfield Opportunity Area.

ATTACHMENT A

Note: See Appendix B-1 for Copy of Town of Riverhead WSRR Community Designation Application, October 21, 2014

ATTACHMENT B

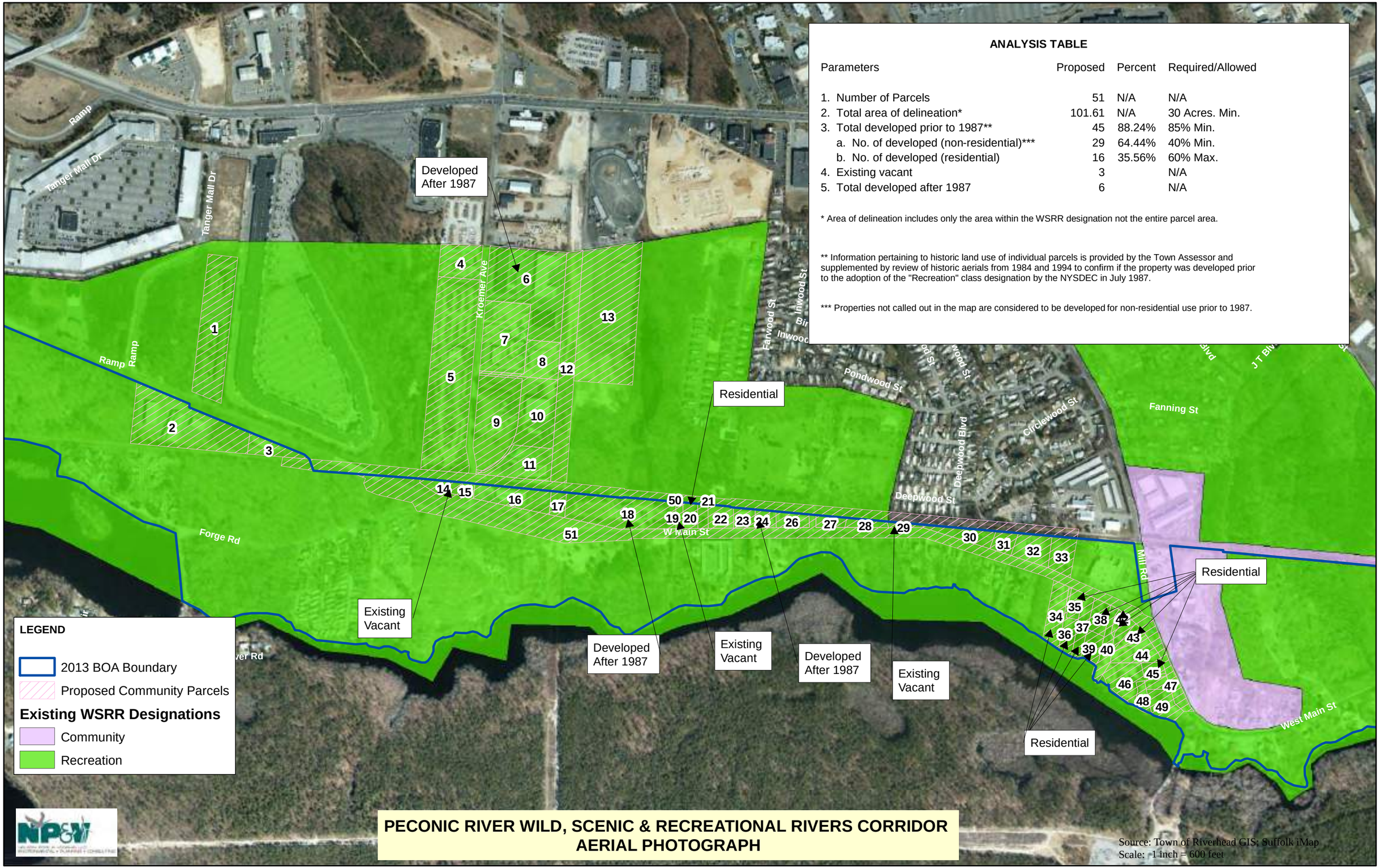
Existing WSRR Designations



PECONIC RIVER WILD, SCENIC & RECREATIONAL RIVERS CORRIDOR
EXISTING DESIGNATIONS

ATTACHMENT C

DEC WSRR – Analysis of the modified area proposed for change in designation from “Recreation to “Community”



ANALYSIS TABLE

Parameters	Proposed	Percent	Required/Allowed
1. Number of Parcels	51	N/A	N/A
2. Total area of delineation*	101.61	N/A	30 Acres. Min.
3. Total developed prior to 1987**	45	88.24%	85% Min.
a. No. of developed (non-residential)***	29	64.44%	40% Min.
b. No. of developed (residential)	16	35.56%	60% Max.
4. Existing vacant	3		N/A
5. Total developed after 1987	6		N/A

* Area of delineation includes only the area within the WSRR designation not the entire parcel area.

** Information pertaining to historic land use of individual parcels is provided by the Town Assessor and supplemented by review of historic aerials from 1984 and 1994 to confirm if the property was developed prior to the adoption of the "Recreation" class designation by the NYSDEC in July 1987.

*** Properties not called out in the map are considered to be developed for non-residential use prior to 1987.

PECONIC RIVER WILD, SCENIC & RECREATIONAL RIVERS CORRIDOR AERIAL PHOTOGRAPH

Source: Town of Riverhead GIS; Suffolk iMap
Scale: 1 inch = 600 feet

ATTACHMENT D

Proposed Community Designation Area Map Description

Recommended Community Designation Area Map Description

Beginning at the southwest corner of the former 84 Lumber Property (which is located on the south side of West Main Street, south of the eastern side of its intersection with Tanger Mall Drive) following the property's western lot line north for approximately 515 feet, then heading southeast along the northern boundary of the MTA LIRR tracks approximately 405 feet, then heading north approximately 983 feet along the lot line of the multifamily residential community, then heading approximately 214 feet east along the northern lot line of the multifamily residential development, then heading south approximately 1,029 feet along the eastern lot line of the multifamily residential development, then heading southeast along the northern limit of right-of-way for West Main Street approximately 1,041 feet to where it intersects with the MTA LIRR tracks, then heading east approximately 444 feet along the northern boundary of the MTA LIRR tracks, then heading north approximately 1,581 feet along the western boundary of the industrial development, then heading east approximately 293 feet to the property intersection with Kroemer Avenue, then heading south approximately 1,604 feet along the western boundary of the right-of-way associated with Kroemer avenue, then heading east approximately 49 feet along the southern boundary of Kroemer Avenue, then heading north approximately 1,607 feet along the eastern boundary of the Kroemer Avenue right-of-way, then heading approximately 539 feet east, then heading approximately 543 feet northeast to the eastern edge of the developed area, then heading approximately 1,014 feet south along the eastern property boundary of the developed area, then heading approximately 413 feet west, then heading approximately 716 feet south to the intersection with the MTA LIRR tracks, then heading east approximately 3,599 feet along the northern boundary of the MTA LIRR tracks, then heading approximately 345 feet south along the western property boundary of the U.S. Postal Service facility to where it intersects with West Main Street, then heading southeast approximately 645 feet along the northern boundary of the right-of-way of West Main Street to the eastern side of its intersection with Mill Road, then heading southeast approximately 716 feet along the eastern boundary of the West Main Street right-of-way, then heading west approximately 72 feet across the West Main Street right-of-way, then heading southwest approximately 104 feet along the southwestern boundary of the developed area, then heading east and northeast along the shoreline for approximately 1,291 feet, then heading north approximately 407 feet along the western side of the developed parcel to where it intersects with the southern boundary of the West Main Street right-of-way, then heading northwest along the southern boundary of the West Main Street right-of-way for approximately 4,234 feet to its intersection with Forge Road, the heading northwest along the southern boundary of the Forge Road right-of-way for approximately 306 feet, then heading north-northwest for approximately 64 feet across the Forge Road right-of-way, then heading approximately 512 feet northwest along the West Main Street right of way to its southern intersection with the MTA LIRR tracks, then heading west for approximately 512 feet along the southern boundary of the MTA LIRR tracks, then heading north approximately 64 feet across the MTA LIRR tracks, then heading west along the northern boundary of the MTA LIRR tracks for approximately 1,071 feet, to the point of beginning.

*It is noted that the above description is not a survey grade metes and bounds description, and was generated utilizing Suffolk County GIS tax parcel data.

ATTACHMENT E
(Property Data Collection Sheet)

Property Data Collection

WSRR Change in Designation

Site ID	Parcel ID	Parcel Area (Acres)	Parcel Area within WSRR (Acres)	Owner First Name	Owner Last Name	Address	Current Land Use	Developed Prior to 1987
1	0600118000300008000	4.82	4.82		101 NORTH BROADWAY ASSOCIATES	1750 ROUTE 25	Commercial	YES - 1965
2	0600118000400010000	5.52	5.52		SPIRIT SPE PORTFOLO 2007 2 LLC	WEST MAIN ST	Commercial	YES - 1984
3	0600118000400011000	0.84	0.84	GEORGE	KALAMARAS	W MAIN ST CALV	Commercial	YES - 1948
4	0600119000100035005	2.44	1.57		KROEMER AVENUE CORP		Commercial	YES - 1950
5	0600119000100035003	9.36	9.36		KROEMER AVENUE ASSOCIATES INC	31 KROEMER AVE	Commercial	YES - 1962
6	0600119000100028007	6.08	6.07		KROEMER AVENUE HOLDINGS LLC	44 KROEMER AVE	Commercial	Developed after 1987
7	0600119000100029000	3.56	3.56		NICOLIAS LTD	KROMER AVE	Commercial	YES - 1948
8	0600119000100030000	1.53	1.53	JOSEPH W	MAVELLIA	KROMER AVE CAL	Commercial	YES - 1950
9	0600119000100032001	3.98	3.98	MILDRED G	COWAN	KROEMER AVE	Commercial	YES - 1948
10	0600119000100032002	3.07	3.07		KROEMER AVENUE ASSOCIATES LLC	46 KROEMER AVE	Commercial	YES - 1981
11	0600119000100031002	1.90	1.90		PARACO GAS CORP	KROMER AVE	Commercial	YES - 1946
12	0600119000100025000	6.70	4.15		LONG ISLAND LIGHTING CO	S OF ROUTE 58	Institutional - ROW	YES
13	0600119000100024000	24.86	15.96		WORLD LIFE ENTERTAINMENT INC	OLD COUNTRY RD	Commercial	YES - 1948
14	0600119000200001000	0.53	0.53	ALISON	HO	1581 MAIN ST	Vacant	Vacant
15	0600119000200002000	0.08	0.08	WALTER	SEMASCHUK	W MAIN ST CALV	Institutional	YES
16	0600119000200004001	1.66	1.66		WR GELATERIA INCORPORATED	1556 MAIN ST	Commercial	YES - 1956
17	0600119000200005000	0.43	0.43		LONG ISLAND LIGHTING CO	W MAIN ST CALV	Institutional - ROW	YES
18	0600119000200007001	3.61	3.61		KROEMER RTE 25 LLC	WEST MAIN ST	Commercial	Developed after 1987
19	0600119000200008000	0.22	0.22		COUNTY OF SUFFOLK	WEST MAIN ST	Vacant	Vacant
20	0600119000200010001	0.42	0.42	LUSI	NENJIVAR	1446 WEST MAIN ST	Residential	YES - 1945
21	0600119000200011000	0.28	0.28	ELIZABETH	DANOWSKI	W MAIN ST	Residential	YES - 1950
22	0600119000200012000	0.64	0.64		RJT REALTY ASSOCIATES	1432 WEST MAIN ST	Commercial	YES - 1935
23	0600119000200013000	0.48	0.48		LORNAN REALTY ASSOCIATES	W MAIN ST	Commercial	YES - 1956
24	0600119000200014000	0.28	0.28	GEORGE J	NUNNARO	W MAIN ST	Commercial	Developed after 1987
25	0600119000200015000	0.13	0.13	GEORGE J	NUNNARO	W MAIN ST	Residential	YES - 1965
26	0600119000200016000	0.55	0.55		1396 WEST MAIN STREET LLC	1396 W MAIN ST	Commercial	YES - 1929
27	0600119000200017000	0.37	0.37	JOHN	WANAT	1368 MAIN ST	Commercial	YES - 1957
28	0600119000200018000	0.37	0.37	DOROTHY A	SHORE	W MAIN ST	Residential	YES - 1965
29	0600119000200019000	0.18	0.18	THOMAS J	UHLINGER	WEST MAIN ST	Vacant	Vacant
30	0600119000200020000	0.86	0.86	STANLEY	POLLACK	1288 WEST MAIN ST	Residential	YES - 1929
31	0600120000200001000	0.52	0.52	MARY	WILLIAMS	1278 MAIN ST	Residential	YES - 1909
32	0600120000200002000	1.13	1.13		CORNERSTONE PROPANE L P	WEST MAIN ST	Commercial	YES - 1953
33	0600120000200003000	0.98	0.98		DAW REALTY OF RIVERHEAD INC	WEST MAIN ST	Commercial	YES - 1940
34	0600119000200027000	1.16	1.16	KAREN	NIZICH	1241 WEST MAIN ST	Residential	YES
35	0600119000200026001	0.40	0.40	HELEN D	COZINE	1231 W MAIN ST	Residential	YES
36	0600119000200026002	0.63	0.63	BRIAN	LEWIN	1233 W MAIN ST	Residential	YES
37	0600119000200025000	0.75	0.75		MIL WAR INC	WEST MAIN ST	Residential	YES
38	0600119000200024000	0.64	0.64	MICHELE	MULRENAN	1215 MAIN ST	Residential	YES
39	0600119000200023000	0.57	0.57	RICHARD	SCOTT	1217 WEST MAIN ST	Residential	YES
40	0600119000200022000	0.78	0.78	ROY T	OSMAN	1205 W MAIN ST	Commercial	YES - 1972
41	0600119000200021000	0.21	0.21	SALLY M	OSMAN	1205 W MAIN ST	Residential	YES - 1927
42	0600125000200023000	0.35	0.35	BERTHA	PFLEIGER	W MAIN ST	Residential	YES - 1930
43	0600125000200025001	0.37	0.37	ROY T	OSMAN		Residential	YES - 1930
44	0600125000200025002	0.98	0.98	ROY T	OSMAN		Commercial	YES - 1938
45	0600125000200027002	0.32	0.32		ZBA HOLDINGS INC	1159 WEST MAIN ST	Residential	YES - 1976
46	0600125000200027005	1.37	1.37	ROY	OSMAN	WEST MAIN ST	Commercial	YES - 1966
47	0600125000200027003	0.29	0.29		DEV 2074 INC	1159 WEST MAIN ST	Commercial	YES - 1965
48	0600125000200026002	0.40	0.40	DAVID LEE	FULTON	OFF W MAIN ST	Commercial	YES - 1958
49	0600125000200028000	0.89	0.89	MATTHEW	ALFARO	WEST MAIN ST	Commercial	YES - 1966
50	0600119000100039000	9.08	6.37		MTA LIRR		Institutional - Railroad	YES
51	No Tax Parcel	13.86	13.86				Institutional - Road	YES

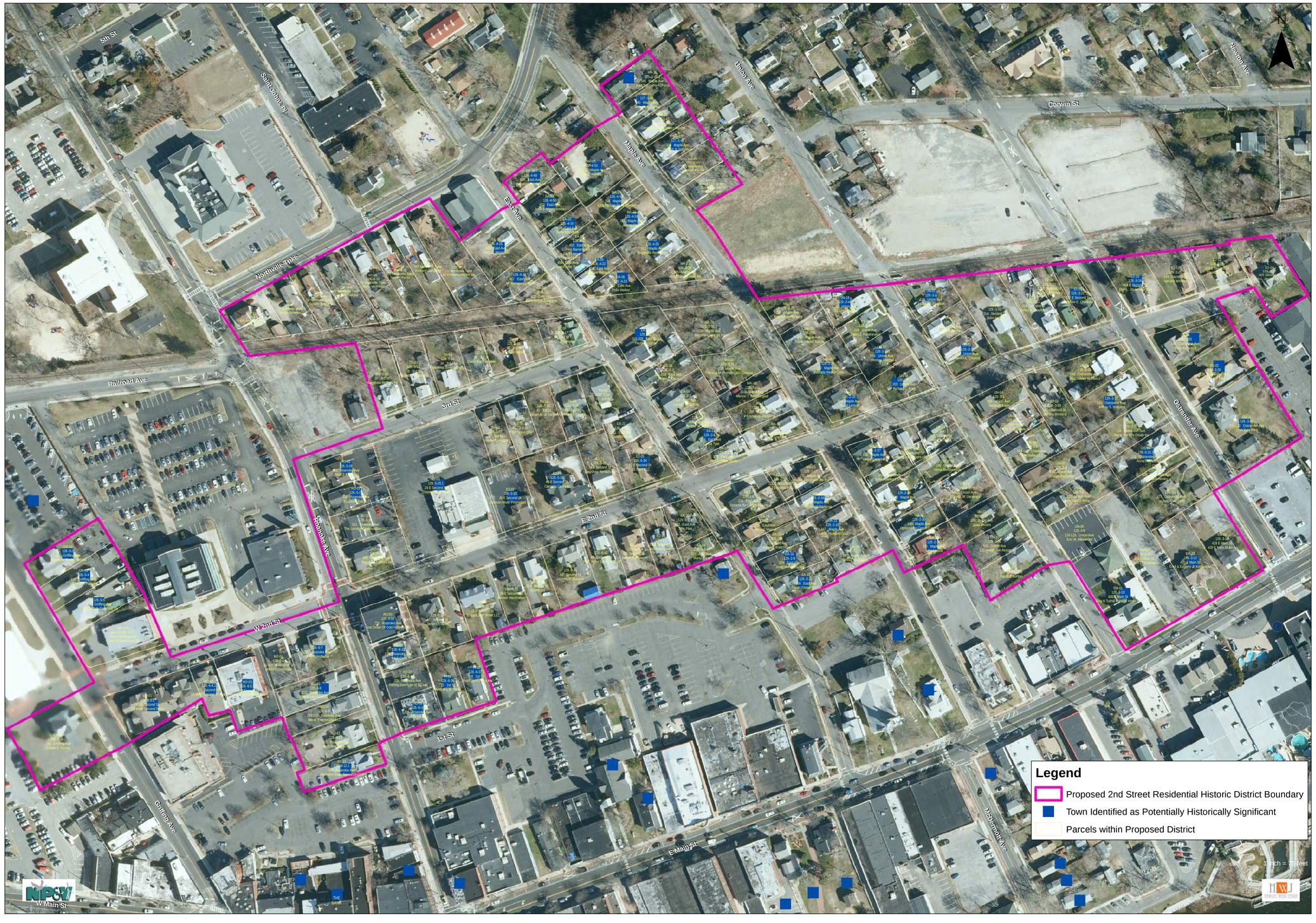
Items highlighted in blue are apparent in the 1984 aerial photograph

Items highlighted in green are based on information received from Town Assessors Office

APPENDIX C

Historic District Inventory Materials

Second Street Riverhead Historic District
Application for Placement on the National Register of Historical Places



Town of Riverhead, NY. Second Street District Survey Summary

3/20/2015

OVERVIEW

The geographic location of Riverhead is at the west end of the Peconic Bay where it meets the fresh water of the Peconic River. This was the eastern most point of Long Island where one could easily cross from the north fork to the south fork, and was the natural location for a small shire to form. This was the spot where the roads, the river, the bay and (by 1844) the railroad all met. The majority of the land that now comprises Riverhead was then called Aquabouke and was part of a patent purchased from the Indians by the residents of Southold in 1649, though a record Deed to confirm this transaction does not appear until December 7th 1665. This natural crossing point was of little other historical relevance until sometime after 1659 when a small piece of the land was granted to John Tooker and Joshua Horton, where they built a saw mill utilizing the river's water power. In 1728 the first courthouse was framed and served as courthouse and jail. This was the start of the town center as we now know it.

Though the Suffolk County Seat had been at the "river head" since 1727, in the mid 1700s Riverhead was still a small village. The sparsely populated area was for the largest part agriculturally barren, and poor by most standards. The land had been overworked and the local farmers had not yet realized the value of fish as fertilizer or established a regular shipping trade protocol to import fertilizers from elsewhere. Immediately after the American Revolution many local residents were deep in debt. Much land had been confiscated after the war, and sold off at the discretion of the military. Court records of the time showed over a hundred writs of debt payable to the "Court of Common Plea". For almost three decades there were only four houses in the town center, and essentially no new growth. Among them were the Griffing Hotel, the Joseph Osborn house, the millhouse built by William Albertson, the Courthouse (which also served as a home for David Horton), the jailhouse and little else. It took nearly a generation for agriculture, the local economy and general commerce to begin moving again.

Soon thereafter, right around the turn of the 19th century, farmers began to fish bunker for use as fertilizer. This marked a turning point. The farmers were then able to cultivate crops that would facilitate production of better manure fertilizer, providing a more permanent soil improvement, and the basis for a stabilized agricultural economy. This contributed to increased local commerce for the entire community. The ensuing spur in growth eventually allowed Riverhead to become a bustling center at the east end of Long Island.

DRAFT

Officially formed in 1792, the Town of Riverhead ultimately became a center for commerce, judiciary process, building materials, agriculture and much more. By 1815 Hubbard and Wells Griffing had built the sloop McDonough, the first of many to be built locally after the war. By 1825 the downtown had grown considerably and had numerous new businesses. Many with owner's names that are still prominent in Riverhead today. William Griffing, Elijah Terry and William Jagger, all local residents, each now had shops downtown. John Corwin built a small hotel, where he lived, on property adjacent to what eventually would be the Griffing Hotel (owned by Henry L. Griffing). The first Riverhead fire Engine Company, "Red Bird" was organized in 1833. By 1834 Corwin had enlarged his hotel significantly. In 1856 Charles Hallett, a great contributor to the prosperity of Riverhead, opened a planing mill. Ten years later he built a second planing mill powered by steam on the north side of the river. By 1870 Mr. Hallett had also started a paper mill and two years later had expanded to begin milling flour as well. His patrons spanned the island from Queens to Greenport. Many homes of these founding individuals and families still stand in Riverhead.

SELECTION CRITERIA

The area of Riverhead selected for the following survey is directly adjacent to the already designated Main Street National Register District to the south, which is primarily commercial in nature. While working through the Second Street district selection process, sponsors expressed the importance of understanding that this district was predominantly a residential one. This had developed in a time period spanning a century between the 1840s and 1940s, as a neighborhood for the professionals, merchants, laborers, ship builders, craftsman and new immigrants alike, all of whom worked downtown. The Second Street neighborhood is comprised of structures that, for the most part, have also remained residential in modern usage. For this reason it has a distinct flavor all its own. It should, by this logic, be the residential counterpart to the commercial Main Street.

The nearly 150 significant structures in this neighborhood include everything from large ornate Queen Anne Victorian homes with complex roof forms to modest Colonial Revivals, Italianate, Greek Revival, Capes and many simple National Folk style cottages. Some exhibit influences from combinations of these period styles. Though many were interpretations of European styles of the day the architecture is all primarily domestic. Overall the resulting character, as a conspicuously residential district, is a theme that is apparent to even the most casual observer.

DRAFT

BOUNDARY

The boundary for this district (encompassing just under 35 acres) was a natural progression in the process that has been underway for over a decade. To the south is the Main Street National Register District. The northern boundary of that district essentially coincides with the southern boundary of the subject Second Street District. The northern boundary of the Second Street District is derivative of the locally designated Riverhead Downtown Historic District but essentially offsets one block north to also include contiguous homes north of the railroad, along the southern spur of Northville Turnpike, that meet the selection criteria. This northern boundary is a stretch of the turnpike that was originally known as Fourth Street. The east and west boundaries run along the north/south streets (Griffing Avenue and Ostrander Avenue) that are at each end of Second Street. This area of focus covers a specific contiguity that experienced a definitive and formative growth spurt, speaking directly to the historic character of residential Riverhead. The actual path of the boundary articulations relates to the contiguous groupings of characteristic and contributory homes along these streets. A secondary but also vital criteria was to include as many of the period structures, with significant history or attributes, as possible within the guidelines.

METHODOLOGY

Undertaking this Second Street survey is just one part of a continuing effort for the area. Previous endeavors have included the Main Street National Register District immediately to the south (approved in 2012), which is predominantly commercial in nature, and the Downtown Riverhead Historic District (locally designated by the Town of Riverhead in 2006). The Main Street effort afforded qualification for 37 different contributing resources to receive rehabilitation tax credits, and contributed significantly to much needed ongoing town revitalization efforts. Prior to that the Riverhead Landmarks Preservation Commission (LPC) and the Town took on the larger Downtown Riverhead Historic District, which is an area that encompasses the entire downtown (effectively the Main Street and Second Street districts combined). This district is quite sizeable, boasting 220 contributing structures that range from the 1840s through the early 1960s.

The LPC and town leaders have worked tirelessly to raise awareness and find ways that provide incentives for developers to preserve and restore instead of demolish and rebuild. They have worked closely with the residents to help foster a culture that values such a colorful and storied past. These past endeavors were both accompanied by strategic advance communication initiatives, that proved very effective keeping the town board and property owners apprised of the potential associated benefits and opportunities. Rewards for their efforts have included

DRAFT

unanimous approvals for both of these nominations, as well as successful historic restoration of several locally prominent structures (including the 1933 Art Deco Suffolk Theater and the 1951 Woolworth Building) that may have otherwise been lost. This campaign, the potential tax credits and the Landmark Code for the local district appear to have already influenced one owner in the proposed Second Street district. 428 East Main Street (EM-04 in the survey), it was believed, was a candidate for demolition. The prominent local developer seems now intent on a major restoration as a destination restaurant.

The Second Street effort has been sponsored by The Town of Riverhead and the LPC. Funding was provided under a New York State D.E.C. Brownfield Opportunity Area Grant. Nelson Pope & Voorhis, LLC (NPV) and Hawkins Webb Jaeger, PLLC (HWJ) have been engaged as planning and survey consultants, to aid in the survey and mapping work as well as preparation of the survey and report documentation.

The majority of fieldwork for this project was conducted in July and August of 2014. This was done in the form of on-site visual observation, and photography from the public right of way. Base mapping was prepared utilizing Geographic Information Systems (GIS), with parcel database information and original boundary provided by the Town of Riverhead. The GIS is also the tool that allows us to calculate the 1,510,214 s.f. (34.67 ac.) area for district boundary. The parcel database is provided through Suffolk County Real Property by license agreement with the Town of Riverhead – and sublicense agreement with NPV as consultant to the Town. The Town also provided a preliminary table of points identifying all residential structures with potentially historic significance. These points, the preliminary boundary and all parcel outlines were mapped using a 2013 aerial photograph as the base. The data was then merged with the SHPO Building-Structure Inventory for the area. The boundary was also slightly modified to incorporate several additional structures believed to have the potential for historic significance. The parcel identification numbering convention was designed to emulate that of the already established SHPO inventory. Map points have been tagged to correspond with the data and photographs in an EXCEL spreadsheet. The spreadsheet format is based on examples of previous surveys provided by SHPO. Initial data used was based upon existing information provided by the LPC and supplemented through fieldwork and research.

RECOMMENDATIONS

The process of surveying, compiling, and reporting such a comprehensive collection of historical data has provided a clear and concise yield that was entirely predictable. The obvious benefit is simply that each of the individual participants comes away with a better understanding of the significance of the subject neighborhood,

DRAFT

and thereby a better understanding of the associated historical value. Each participant comes away with a clearer understanding of the process and protocol required to establish such a district and the importance of doing so. The unexpected benefit however, might be that the collective knowledge associated with this kind of team effort is greater than the sum of its individual parts. It will generally be far more consistent and effective tool when disseminating information to the community. The collective knowledge will offer more intuitive inspirations for specific methods of informing and educating the decision making public.

The next steps toward historic preservation have already begun with a robust advance outreach campaign, to inform all of the residents that will be affected. This should include a simple, plain language, bullet point outline illustrating some of the obvious benefits already gained by the way of the Main Street National Register. In a small community, such as this, it should include town meetings, mailings and a personal, boots on the ground, outreach campaign through the LPC, local merchants and civic leaders alike. All available local media (print, and electronic) should be engaged to whatever extent possible. This should all be done in advance of any official notifications or potentially intimidating legalese. It will be important to preemptively dispel any misconceptions the residents may have about how a National Register designation will affect them. Experience has taught us that misinformation is our biggest adversary. A well informed public will be our greatest ally.

BIBLIOGRAPHY

Wood Brick and Stone – A Walking and Driving Tour of Historic Downtown Riverhead
Copyright 2008 Riverhead Landmarks Preservation Commission

SEEKING THE PAST – Writings from 1832-1905 relating to History of the Town of Riverhead
Copyright 2004 Riverhead Free Library, Edited by Tom Twomey

History of the Town of Riverhead Written by Hon. George Miller in 1876

RIVERHEAD Written by R.M. Bayles in 1882

Riverhead: The Halcyon Years1861-1919 by Thomas M. Stark Copyright 2005

Map of Suffolk County, L.I. NY. From Actual Surveys by J. Chace Jr. Published by John Douglass 1858

Atlas of Long Island, NY. From Recent and Actual Surveys by Beers Comstock & Cline 1873

Atlas of a Part of Suffolk County, L.I., NY. South Side Ocean Shore Vol. II New York: E. Belcher Hyde, 1916

Town of Riverhead Tax Assessor's Archives

DRAFT

Town of Riverhead, NY. Second and Ostrander District Survey Summary

8/8/2015

OVERVIEW

The geographic location of Riverhead is at the west end of the Peconic Bay where it meets the fresh water of the Peconic River. This was the eastern most point of Long Island where one could easily cross from the North Fork to the South Fork, and was the natural location for a small shire to form. This was the spot where the roads, the river, the bay and (by 1844) the railroad all met. The majority of the land that now comprises Riverhead was then called Aquebogue (with many variant spellings) and was part of a patent purchased from the Indians by the residents of Southold in 1649, though a record deed to confirm this transaction does not appear until December 7th 1665. This natural crossing point was of little other historical relevance until sometime after 1659 when a small piece of the land was granted to John Tooker and Joshua Horton, where they built a saw mill utilizing the river's water power. In 1728 the first courthouse was framed and served as courthouse and jail. This was the start of the town center as we now know it.

Though the Suffolk County seat had been at the "River Head" since 1727, in the mid-to-late 1700s what is now downtown Riverhead was still a small village with just a few houses, a tavern and a few mills. The land around the court house was mostly sandy and not fit for agriculture. Most of the town's population lived in areas with good soil, either to the east in the what are today the hamlets of Aquebogue, Jamesport and Laurel or to the north on the string of hamlets stretching along Sound Avenue. Even in the areas with the bets soil, the land had been overworked and the local farmers had not yet realized the value of fish as fertilizer or established a regular shipping trade protocol to import fertilizers from elsewhere.

Immediately after the American Revolution many local residents were deep in debt. Much land had been confiscated after the war, and sold off at the discretion of the military. Court records of the time showed over a hundred writs of debt payable to the "Court of Common Plea". For almost three decades there were only four houses in the town center, and essentially no new growth. Among them were the Griffing Hotel, the Joseph Osborn house, the millhouse built by William Albertson, the Courthouse (which also served as a home for David Horton), the jailhouse and little else. It took nearly a generation for agriculture, the local economy and general commerce to begin moving again.

The Town of Riverhead was separated from Southold in 1792. But, it would still be another couple of decades before a real town center began to form. Around the turn of the 19th century, farmers began to fish for bunker (menhaden) for use

as fertilizer. This marked a turning point. The farmers were then able to cultivate crops that would facilitate production of better manure, providing a more permanent soil improvement, and the basis for a stabilized agricultural economy. This contributed to increased local commerce for the entire community. The ensuing spur in growth in agricultural prosperity eventually allowed downtown Riverhead to become a bustling commercial center for the east end of Long Island.

Downtown Riverhead ultimately became a center for commerce, judiciary process, building materials, agriculture, entertainment and much more. By 1815 Hubbard and Wells Griffing had built the sloop McDonough, the first of many to be built locally after the war. By 1825 the downtown had grown considerably and had numerous new businesses. Many with owner's names that are still prominent in Riverhead today. William Griffing, Elijah Terry and William Jagger, all local residents, each now had shops downtown. John Corwin built a small hotel, where he lived, on property adjacent to what eventually would be the Griffing Hotel (owned by Henry L. Griffing). The first Riverhead fire Engine Company, "Red Bird" was organized in 1833. By 1834 Corwin had enlarged his hotel significantly.

Starting in the 1840's the surrounding agricultural areas gradually recovered from the post-Revolutionary war agricultural depression that had severely hit the area. Two factors drove this growing agricultural prosperity -- the growing New York City markets to the west and the increased availability of fertilizer to restore worn out lands. In addition, as steam power made water access easier on the Peconic estuary and the construction of the Long Island Railroad in 1844 provided easier access to urban markets, downtown suddenly began to grow rapidly as a commercial hub. Mills on the Peconic River also increased in importance and number, especially with the Perkins textile mill at Upper Mills. Growing governmental business led to a new and larger county court house in 1855. Inns and taverns sprang up to serve travelers doing business in the town. Numerous commercial and residential buildings were constructed in the two decades before the Civil War. Downtown also got its first two churches and schools during these two decades -- well after most of the other hamlets in the town. In 1856 Charles Hallett, a great contributor to the prosperity of Riverhead, opened a planing mill. Ten years later he built a second planing mill powered by steam on the north side of the river. By 1870 Mr. Hallett had also started a paper mill and two years later had expanded to begin milling flour as well. His patrons spanned the island from Queens to Greenport.

Initially, virtually all the businesses and homes were strung out on East and West Main Streets, with the most important businesses clustering near the intersection with Peconic Avenue. Some businesses operated along Peconic Avenue (then called Bridge Street because it had the only bridge to the South Fork.) There were also a few mills and houses on the south side of the Peconic River, technically in Southampton Town, but always considered an integral part of

Riverhead's downtown. There was another cluster of mills and homes about two upstream at a place then called Upper Mills.
However, as the downtown area continued to grow, additional streets were laid out north of Main Street to accommodate new homes. First and Second Street, appeared about 1840, as did East Avenue. The 1858 shows First Street running from East Street one block to Abner (now Roanoake) Avenue. Second Street was a block an a half, running from East Street a little past Abner. This was the beginning. Later, additional streets were laid out perpendicular to Main Street. By the 1873 Beers Map, Second Street had been extended all the way to Griffing Avenue on the west and Third Street appeared north of Second. Within the next couple of decades, as the commercial center continued to expand, Union and Maple Avenues and eventually Ostrander Avenue were laid out perpendicular to Main Street and Second Street was extended eastward to intersect all of these newer cross streets.

This is basically the area proposed for the Second and Ostrander district. In the 19th century, downtown also expanded to the northwest, well beyond the railroad tracks. However, that area, potentially another National Register district, is no longer contiguous with the Second and Ostrander district, having been largely cut off by the railroad tracks, parking lots and 20th century development. Downtown residential construction also ultimately expanded further to the northeast in the 20th century, but most of the houses constructed in those areas are after our period of significance and less interesting architecturally.

Significance

The Second and Ostrander district, encompassing the whole length of East and West Second Streets as well as nearby parts of the avenues that cross Second, is significant for several reasons. First of all, it is a largely intact residential neighborhood built between 1840 and 1940 to support the nearby commercial district that grew up along Main Street during the same time period and that was placed on the National Register in 2012 That district is almost entirely commercial in nature. The adjacent Second and Ostrander district is almost entirely residential. The two districts complement and support each other.

The areas nearest to the core of the 19th century Main Street commercial area were the homes to the merchants who owned the stores on Main Street, the lawyers who served the local clientele and practiced in the nearby Suffolk County Courthouse, the doctors who took care of patients from the whole surrounding area and the bankers who got rich on them all. Together these men formed the backbone of Riverhead's commercial and merchant classes. Further out are the more modest homes of skilled craftsmen such as a taxidermist, harness maker and a gunsmith. Just a slightly longer walk away from Main Street were the even-more-modest homes of the laborers who made their living downtown.

The owners of these homes represent a wide range of professions, and give a good snap-shop picture of what a agricultural-center town looked like in the late 19th and early 20th centuries. In addition to the expected merchants, lawyers, clergy and doctors, there were a surprising number of other occupations represented: harness maker, cigar maker, gun smith, shoe and boot maker, telegraph operator. These included both the owner of the town's Democratic newspaper and the home of a long-time Republican congressman. There was even a taxidermist and a carpenter who moonlighted as the town's undertaker.

The homes also represent a cross section of the surprisingly diverse ethnic and cultural groups that made Riverhead their homes in the 19th and early 20th centuries. The oldest homes were mostly built by descendants of the area's original Puritan families who first settled Riverhead in the early 18th century. But, the mix soon included others who moved to Riverhead from other parts of Long Island and from nearby states, presumably for the economic opportunities the growing town offered.

Starting in the mid-19th century, there was significant Irish immigration to Riverhead, and many of these settled in Third Street area and the upper reaches of East and Maple Avenues. They became the nucleus of St. John's RC Church, which started in the district on East Avenue and is today located just a little further north on the same street, but just beyond the bounds of the proposed district. Later in the century, a different group of immigrants -- East European Jews -- were attracted by the commercial opportunities in town. By the end of the century, they owned a number of stores along Main Street and of course a number of the homes in the residential areas just to the north. Mixed in with these groups were individuals of Swiss, German and French origin.

And finally, in the 20th centuries, the smaller homes along the upper reaches of East, Maple and Union Avenue began to attract African Americans. Many of these had first come north as part of the Great Migration to work as farm workers, but some gradually moved into town. Indeed, in 2011 Maple Avenue was renamed Pfc. Garfield Langhorn Avenue in honor the son of one of these families who became a Vietnam War hero.[1] The Langhorn family, following a pattern for typical for African-Americans who moved to the area in large numbers in the 1920s through 1950s as part of the Great Migration to work on area farms. By the 1960s, they were moving beyond farm labor and often moving in to town. In the case of the Longhorn family, this was to a small house, probably originally built for Irish immigrants, on the upper reaches of Maple Avenue. The house has since been demolished.

Of the 150 resources in the survey district, 133 were built between 1840 and 1940. Virtually all of these, 128 or 87% of the total number of resources in the district can be considered as contributing.[2] While there are many resources in excellent condition, others are far from pristine condition, but definitely restorable. If we include resources through the early 1960s, as was done in the neighboring

Main Street National Register District, this would bring the total to 145 resources or nearly 97 percent of the total. Remarkably, only five structures have been built in the last 50 years and only a few have been lost.. In essence, this district encompasses a true snapshot of one small town's growth over a century of time.

The area is also architecturally significant. Because it developed gradually over an entire century from 1840 through 1940, there are examples of virtually every style of architecture that was popular during those decades. These range from the Greek Revival style of the earliest homes in the district and a lone Gothic Revival. Then, starting in the 1850s there are a large number of Italianates. Some of these are full-blown architectural masterpieces, while others are more modest and the smallest have just a few Italianate features. Following the Italianate are Colonial Revival and Queen Anne homes. Alongside these are some very simple homes that can only be characterized as National Folk.

Moving into the 20th century, we find newer versions of the Colonial Revival, as well as gambrel-roofed Dutch Revivals and the ubiquitous Four Square. Many homes have features of more than one style -- either they were built that way or because of subsequent modifications. However, because the older parts of the district developed gradually, with considerable infilling and rebuilding, most streets have a pleasing variety of homes from one to the next. Nowhere are there rows of nearly identical structures, and seldom are there rows of more than three or four houses built in the same decade.

1840s: Greek Revival

Development in the Second and Ostrander District began in 1835 with the purchase of a 170-acre parcel north of Main Street by Chapman Davis, Charles Vail and Elijah Terry from the Jagger family. The threelater divided this parcel amongst themselves.[3] The south end of this so called "Jagger parcel," which ran about a mile-and-a-half north to Middle Road, included all of the proposed district except for the west end abutting Griffing Avenue, which still belonged to the Griffing family at the time. Up until this point, all homes and commercial development in the rapidly growing village had been along what is now East and West Main Streets and Peconic Avenue.

Davis, Vail and Terry became the original developers of the area. In 1837, the town laid out a road running northerly from Main Road through their parcel to Middle Road.[4] First called Center Street, the name changed to Suffolk Highway and then to Abner Street before finally becoming Roanoke Avenue later in the 19th century. Most likely, the developers laid out East Street, as well as First and Second Streets about the same time to facilitate development of their property. Much like subdivision roads today, probably these were initially private roads, as they were not recorded in the town's official records as public thoroughfares.

The oldest homes in the district are five structures that likely date to the 1840s, shortly after these streets were opened. Like the Davis-Corwin House at 133 East Main Street and the original part of the Congregational Church from the same period (both in the adjacent Main Street National Register District), three of these homes display Greek Revival features.

The most fully developed is the Corwin-Davis House at 215 Roanoke Avenue, originally home to B. B. Corwin. Like the other two Greek Revival homes in the district, it is an end gable story-and-a-half design. It has fine fluted corner pilasters, a typical Greek Revival doorway and belly windows on the two sides. Nothing is known about B.B. Corwin, but later it become the home of John C Davis, who was a partner with Nathan Corwin in a general store downtown and in the firm of Corwin, Davis & Company that owned a lumber yard.

The second end-gable story-and-a-half Greek Revival was probably built by Allen T. Terrell. He was born in Connecticut about 1825. In 1860 he was a telegraph operator at the railroad station, later he was trackmaster of entire Long Island Railroad system. Finally, he became a produce dealer and merchant.

The third Greek Revival probably also built in the 1840s is barely recognizable today and a bit of a mystery. This house may have started out in a different location as it does not appear on the 1858 Chace map. By 1873, it belonged to Azariah Anderson, a stone cutter who worked with George B. Hill whose monument business still survives today as Riverhead's oldest business on Griffing Avenue in the Main Street National Register District. Later, probably around 1900, this house was enlarged to a full two stories with Queen Anne influences.
For many years , it has been in the Hockeiser family, which operated a variety store nearby on Main Street for many years in the mid 20th century.

The fourth house probably also built in the 1840s is the Corwin-Katz house at 12 First Street. This was constructed by Henry W. Corwin, a master builder, for himself. He was responsible for the Methodist church in Riverhead and many other fine buildings in the area. This nicely restored structure shows Gothic Revival features, including the centered front gable with pointed top window and matching pointed shutters.

The east wing of 62 East Second also likely dates to this decade, or possibly the early 1850s. It was originally a small side-gable Cape-style house, typical of the homes built in the agricultural areas of the town in the early 19th century. It was probably built as a parsonage for the Congregational Church. The 1858 Chace map shows it as occupied by Clark Lockwood, a minister born in Connecticut who served in the Riverhead Congregational Church from 1853 to 1857 and then moved to the sister church in Northville where he served from 1858-61. The house may have served as the residence of earlier ministers of the Congregational Church as far back as 1836. The much larger two-and-a-half

story front-gable Italianate part of this house was added to this small wing, probably in the 1870s, long after Lockwood had moved on.

1850s: Italianates and Irish

By the 1850s, tastes in Riverhead had switched to the Italianate -- closely following national trends. The most elaborate and beautifully restored Italianate is the Wells-Robinson house at 223 Roanoke Avenue. It was built by Joshua L. Wells Jr. who was a partner with Silas S. Terry in a general store and lumber yard in the 1850s. Next it was owned by Dr. Henry P. and Carrie Corwin Terry who moved to Riverhead after retiring from a medical practice in Cutchogue in 1890 and became the chief organizer of Suffolk County National Bank, which still has its headquarters in Riverhead just across Second Street. Still later this was the in-town house of Leland Robinson, an agricultural produce dealer.

Equally remarkable are the two Italianates at 214 and 218 Griffing. The Slade-Hallett House was built for newspaper publisher James B. Slade who also owned the "boneyard" where bones were converted to fertilizer. Later it was the home of Samuel Terry Hudson, whose Riverhead Agricultural Works was a leading manufacturer of farm equipment in the area. The house next door was built by Charles Hallett, a nephew of P.T. Barnum, who ran a mill that was then the largest enterprise in town. He produced flour and paperboard -- and the wood moldings and trim that reputedly were used in his self-designed home. He also used the water power and steam engines in his mill to produce electricity. His Electric Light Co. was one of two companies that served homes and businesses in downtown Riverhead. His home was the first in town with electric lights.

Another imposing Italianate, with Tuscan windows on the gable end, from the same period is the Vail house now at 214 Roanoke Avenue. Built for Mrs. J. Vail, it stood originally on the corner of Roanoke Avenue and Second, but was moved about 100 feet south in 1928 to make way for the Odd Fellows Hall which now occupies that location.

Although somewhat modified with some Arts and Crafts features early in the 20th century, the large house next door at 206 Roanoke on the corner of First Street also began life as a high-style Italianate. The large windows, broad eves and belvedere all speak to that period. Originally it probably resembled the Wells-Robinson House at 223 Roanoke. The "modernization" probably occurred early in the 20th century when this was the hoimie of Howell Montoe Reeve, a founder of the Suffolk County Trust Company, whose elegant original building survives just a block away in the Main Street National Register District.

The two-and-a-half-story house across the street at 209-211 Roanoke Avenue also dates to the 1850s, or earlier. It first belonged to William Walkman, an English-born watch maker. He was already living in Riverhead by 1850, but

possibly not at this location. The structure itself has been extensively modified a couple of times, but the basic shape survives from the mid-19th century.

Around the corner at 18 First Street, the Fenimore Meyer House was also built in the 1850s. It belonged to William. H. Edwards on 1858 map. He was a carpenter who served also as an undertaker. Presumably his finely detailed Italianate demonstrated the latest styles in which he could build. In 1902 Jacob Meyer bought the house and enlarged it. In 1896 Meyer had bought out the 42-year-old business of leading merchant Jonas Fishel, which he renamed the Meyer's Dept. Store. The large store was located immediately to the south the facing Main Street, so the walk to the back door of his business would have been only about 100 feet. Rumor has it that Meyer had an underground tunnel connecting house and store, but this is likly untrue. The house is a two-story symmetrical Italianate design with front centered three-story mansard-roofed tower featuring ornate cast iron crest work. The front-gable roof was a 20th century addition over the original more typical Italianate flat roof.

Just slightly less imposing is the two-and-a-half-story three-bay cross-gable Italianate at 204 East Street. In 1873 it was owned by Francis Kline, a Bavarian born shoemaker. Later it was owned by Charles E. Bunce who opened a store in 1883 selling stoves, cooking utensils and dinnerware. He was also a plumber.

At the other end of the economic spectrum are several more modest homes on East Avenue. Number 216 probably began as a Cape-style house that belonged to F. C. Hill on the 1858 map, but was later modified to look more like a Craftsman bungalow. Hill worked in his family's monument business. Just up the street, parts of 302 probably date to the 1850s or even 40s. It was built by William Elton, a British-born boot and shoe maker.

Further up East Avenue, the story-and-a-half front-gable National Folk style cottage at 308 East Street belonged to John Howser, a gunsmith, in 1858. Later it would become St. John's missionary church. By the 1850s, there was a significant population of Irish immigrants, several living in the immediate vicinity of this address. They wanted to have a Roman Catholic church. So, in 1859, John Walsh, one of the first in a wave of Irish immigrants into Riverhead, purchased the property under his own name, but then surreptitiously conveyed it to Bishop McLaughlin for use as a Catholic mission -- the predecessor of St. John's Church which still stands couple of blocks to the north on East Street.

Numbers 318-20 and 311 East Avenue also appear on the 1858 map. At the far end of the spectrum is the small story-and-a-half side-gable cottage now at 326 East Avenue. This was likely built as worker housing near Main Street in the mid-19th century, but moved to its present location in the early 20th century after this part of East Street was opened.

The first map of the area is the 1858 Chace "Map of Suffolk County" (see Figure 1). At that time, Second Street extended only from the boundary of the Jaegger parcel described earlier, a little west of Roanoke Avenue (then called Abner Avenue) to at East Street (now East Avenue). Third Street had not been laid out and there were no north-south cross streets further east off of Main Street. About half of the approximately two dozen homes shown on this map within the district's lines survive today, although some have had major alterations.

1860s and 70s: More Italianates and the beginnings of Colonial Revival

The next map of the area showing homes is the Beers *Atlas of Long Island* from 1873 (See Figure 2). By this point, Second Street had been extended all the way westward to Griffing Avenue, East Street (now East Avenue) had been extended north of the railroad tracks and Third Street had appeared between East Avenue and Abner Avenue, now renamed Roanoke Avenue. To the east, two more streets had also appeared parallel to East Avenue: Concord Street (now called Maple Avenue) and Union Street (now Union Avenue). However, neither of these streets extended north beyond the railroad tracks. Since the earlier map in 1858, considerable development had taken place in the area, with all but a few areas of these streets lined with homes.

The district saw continued development and expansion in the 1860s and 70s. At the top end of Riverhead's economic spectrum were several elaborate Italianates. The fanciest homes were on the two edges of the district. To the west, is the 1868 Jeremiah Edwards House on Griffing Avenue. This two-story cross-gabled Italianate with heavy crown and ornate bracket pairs all around was designed by Riverhead's leading architect George H. Skidmore, whose practice extended over much of Long Island. Edwards was a druggist, as well as a Democratic politician, officer of the Masonic Lodge and a director of the Riverhead Savings Bank.

Just up the street, the Moore-Barnes House 224 Griffing was probably built at about the same time. This two-story Italianate has an elaborate archetypical square cupola with triple graduated arch windows on each of the four sides. It was owned by A.G. Moore on 1873 map. Albert G. Moore, born in New Jersey about 1820, was a toolmaker in the 1860 census, a plane maker in 1865 and a carpenter in 1880.

At the other end of the district is the elaborate cross-gable Italianate built in 1876 by Dr. Joseph L Johnson. Dr. Johnson was a NYU medical school graduate. Today this serves as the Tuthill Funeral Home and is one of the few survivors of the grand homes of Riverhead's professional and entrepreneurial class that once lined East Main Street.

The large the large two-and-a-half-story cross-gable Colonial Revival with asymmetrical front gable dormers 43 East Second also dates from these

decades. It was owned by Wm. Swezey on the 1873 map. William Sweezy, born in 1847 into and old Riverhead family, ran a men's clothing store. He also owned largest ice house in town, capable of storing 6,000 tons in 1906, from which he shipped ice to New York City by train. He was a nephew of the Perkins brothers, Riverhead's wealthiest family.

Moving slightly down the economic scale, we find a series of homes built in these decades that are simpler stylistically and sometimes difficult to classify.
For instance, number 302 East Street shows some Italianate influences, although the later additions are more Queen Anne. William Elton was born in London in 1826, emigrated to the U.S. is 1844 and established a boot and shoe making business in Riverhead the same year. Later this became a shoe store. His son, James Elton, born 1855, was in the fish oil business by 1880, took over his father's shoe business in 1885, in 1895 became manager of the Long Island and New England Steamboat Company, and was also a bank director.

At 306 is a cross-gable Queen Anne built by Elisha Wells, is also typical of the period. He was born 1844, a carpenter from an old Riverhead family. Next, at 316, is the two-and-a-half-story Colonial Revival house built by John Housner. He was a gunsmith with a shop in his house. And, a little north of that, number 324 shows some Italianate influences. It was built by John C. Knoess, born 1823 in Germany. He was both a taxidermist and tailor, with a shop next to his house.

The sections of Union and Maple Avenues nearest Main Street also began to fill with houses of the merchant and professional classes. For instance, 135 Union, another typical home of the period, was owned by A. Downs on 1873 map. Austin Downs was a 64-year-old lawyer in 1870. His son, Austin, Jr., was a horse trainer in Brooklyn in 1880, but was back in Riverhead, living in this house as a veterinary surgeon in 1910. The two-and-a-half-story front-gable house has few architectural flourishes except for the pointed window in the front gable..

Similarly, at 153 Maple the two-story front-gable house built in 1870 (although it does not appear on the 1873 map) also has few distinguishing characteristics, except for the Queen Anne trim on the front porch which is probably a later addition. This was probably built by Sidney W. Reeve, a harness maker from an old Riverhead family.

Growing Irish presence

As we move further up East Avenue (near and across the railroad tracks), houses built in the same period are much prepossessing and harder to classify. For instance, 402 East Avenue, which can best be characterized as National Folk in style, was likely built by Moses Benjamin, a druggist who operated a drug store in the Perkins-Benjamin building [ck] on the corner of Main Street and Roanoke in the NR district. Since Benjamin lived on East Main Street in a house that still

survives as part of the East End Arts complex, this modest home was probably built as a rental property. Similarly, the modest front gable house with minor Italianate influence built by William Brown in 1875 at number 425, just north of the railroad tracks was also probably a rental as Brown lived on Main Road. In both cases early tenants were likely Irish immigrants.

This area near and across the railroad tracks had become the center of a significant Irish community by the 1870s. For example, 425 East Avenue, a vaguely Italianate two-story two-bay house with low-sloped side gables was owned by John Lynch on 1873 map. John Lynch, born 1844 in Ireland, was a tailor. Similarly, the 1873 map shows most of the other homes on East Street north of railroad tracks belonging to families with Irish names such as Welch, Daugherty or Bartlett

Around the corner, on Third Street, most of the homes were part of the same Irish neighborhood. Number 28, which may have been Colonial Revival, but has lost most of its original details, was owned by John Bartlett on the 1873 map, M. Bartley on 1916 map (perhaps misspelling of the same sir names). John Bartley, born in Ireland about 1821, was a tailor. He was one of two trustees when St. John's R.C. Parish was incorporated in 1864.

Number 37, a one-and-a-half-story side gable Eclectic National Folk cottage with some later Craftsman influences, was owned by R. Bartlett on 1873 map. Robert Bartlet was an Irish-born boatman on the 1865 census.

Number 48, a cross-gable with some Italianate influence, was owned by J. Flannigan on 1873 and J. Flanagan on 1916 map. John Flanagan was born in Ireland about 1843. On the 1920 census, he was one of 7 Irish families on Third Street.

Number 58, a modest story-and-a-half with Queen Anne influence, was owned by T. Welch on 1873 map and M. Walsh on 1916 map (perhaps misspelling of the same surnames). Thomas Walsh, a farm laborer, was born in Ireland c, 1839. Mary Walsh, his daughter, lived here in 1920 with a brother John.

However, the street was not entirely Irish, typically mixed. In-between at No 57: is the two-story side-gable gambrel Colonial Revival owned by Charles Davis on the 1873 map. In 1870, Davis is listed as a 68-yea- old gardener and his son, in the same house, was a carpenter.

1880s and 90s

About 16 houses in the district date to these decades. In the pattern that became common, some are scattered around amongst older homes -- such as 36 East Second with its Queen Anne cross gables and the modest Colonial Revival at 404 East Avenue. Again, the homes built in these decades display

the diversity of occupations and origins of the homeowners. For instance, 152 Maple was probably built by Lorimer Raynor, a surveyor. Number 213 was built by William Biggs and his daughter Viola who were cigar makers -- one of several families in that business in Riverhead. And Mrs Albertina Robinson, who lived at 311 Maple, was born in Switzerland of French parents.

There are also clusters of homes a little further out from downtown, built as the residential area expanded. For instance, the Colonial Revival homes at 152, 150, 213 and 311 Maple Avenue.

Another cluster of relatively modest homes appeared along Northville Turnpike (originally Fourth Street) built as the residential border moved further out from the downtown core. Again, we get a diverse sample of owners -- Lafayette Hand, a railroad dispatcher, at number 9, J. Madison Corwin, a carpenter at number 19, Lewis E. young, owner of a butcher shop, at number 13, Frank L. Corwin, a house painter and decorator at number 21 and Thomas Fury, a warden in the nearby county jail, at number 95. Most of these homes are stylistically less full blown, generally with some Queen Anne or Colonial Revival features popular in the period.

Northville Turnpike itself was laid out in 1875 as a diagonal shortcut for farmers in the hamlet of Northville to reach downtown Riverhead, cutting a mile or two off of their wagon ride. However, initially, that road started where it intersects East Street.[5] The section on which these house are located was first called Fourth Street, as it still is on the 1909 E. Belcher Hyde map of the area, and probably predates the rest of Northville Turnpike into which it is incorporated today.

There is another cluster on the upper reaches of Union Avenue, at 153, 213, 219 and 223. The latter two are very modest structures, the first owned by a coal company salesperson, Charles Elton, probably as a rental and the second owned by English-born dress maker Carrie Weeks. Number 153 is a late Italianate built by Thomas Britten a carpenter who later became Fire Department chief.

The most interesting of these houses is the Queen Anne building at 213 Union. It was built by Charles Skidmore, whose father and uncle owned a large mill in downtown Riverhead that manufactured sashes and blinds (i.e., windows and shutters) and other wooden trim elements. Undoubtedly some of the company's products are displayed such as the original porch railings and possibly the Several original Queen Anne decorative stained glass windows that survive is this nicely preserved structure. Another uncle was the architect George Skidmore, a likley source of the above-average design.

1900-1919

The first two decades of the 20th century saw a further expansion of the residential neighborhood to the north and east. These two decades also saw the

construction of 42 surviving homes in the district -- more than in any other twenty-year period. Ostrander Avenue was opened and East Second was extended eastward from East Avenue to intersect Maple, Union and Ostrander avenues. In addition most of the north-south streets were extended further north.

The best example of a streetscape from the early 20th century is Ostrander Avenue. This street shows up in a contemporary postcard as a broad avenue lined by small trees and fine new homes. How did Riverhead get a street with a Dutch family name like Ostrander? Certainly it was not because of early Dutch influence, which was virtually absent on the East End of Long island.

The *County Review*, one of two newspapers that served Riverhead in the early 20th century, reported on March 31, 1905 that "Surveyor Larimer M. Raynor is laying out the lines for the extension of Second Street and of Ostrander and the cutting up of Mrs. Ostrander's property on East Main Street into building lots."[6] Raynor, a scion of an old North Fork family, we have meet before. He built the house at 152 Maple Avenue. But, who was Mrs. Ostrander and how did Riverhead get a street named after a Dutch family?

Although always referred to in the press as "Mrs. Ostrander," her first name was Anna. At that time, she was one of Riverhead's wealthiest women, a person at the pinnacle of local society. How she came to own this land is an interesting story that exemplifies how land development worked in Riverhead. She was born Anna Bostick, the daughter of a New York City stock broker of Dutch dissent. She was also the widow of William C. Ostrander, a wealthy lawyer born in New York City into another Dutch family. His father was a New York merchant and president of a the Mercantile Fire Insurance Company. Like Anna's father, he had a very Dutch sounding name, Cornelius Van Buren Ostrander, and had moved to the city from the Dutch community of Ulster County. So far, not much of a connection to Riverhead in this story.

But, if we go back to the beginning of our story of development of the district, as described above, this was part of a 170 acre parcel running north of Main Street acquired by a consortium of investors in 1835 from the Jagger family and latter divided among the consortium. Elija Terry got the eastern portion.[7] Silas S. Terry, who was partner in a general store and a lumber yard apparently inherited the property. He in turn left it to his daughter, Patience Maria Terry (born 1822) who somehow became the second wife of Cornelius Van Buren Ostrander, the New York City merchant with roots amongst the Dutch settlers of Ulster County in upstate New York.

She shows up as "Mrs. Ostrander" on the 1873 Beers map. This in itself is unusual, as her husband was still alive at the time. The second marriage produced only one son, William C. Ostrander (1853-1894), a New York lawyer who married Anna Bostwick the daughter of a New York stock broker. William was also a real estate speculator and apparently moved back to his mother's

hometown and bought additional properties in the East End. His obituary described him as "a wealthy man."[8] After William's death, Anna became a grand dame of Riverhead society, living with a widowed daughter on Griffing Avenue.

Ostrander Avenue was envisioned as a wide tree-lined boulevard when it was laid out by Raynor (see above) in 1905. Clearly the goal was to make Mrs. Ostrander's lots as valuable as possible. Beautiful homes quickly went up at 130-132, 131, 138 and 146.

The first house on Mrs. Ostrander's property was 428 East Main, on the corner of Ostrander Avenue. It was completed in 1905 by Henry H. Preston. Preston was born about 1845 on Shelter Island and served in the Civil War, where he was wounded and declared a hero. A statue was recently errected in his honor on Shelter Island. He served as town clerk in Shelter Island before moving to Riverhead in 1902 when elected as the county's first full-time sheriff. He moved into the house about the time he retired from the sheriff's office and devoted himself full time to his insurance business. His two-story eclectic house has a square-hipped roof with center gables in front and on both sides. The corner pilasters and pedimented gable over the front porch gave it a Greek Revival appearance.

Next door to the east, the two-and-a-half story Shingle Style house at 420 East Main was also built about the same time. It was owned by B. Frank Howell on the 1916 map. He was of an old Riverhead family, born in 1838, he moved to Riverhead in 1869 and opened a coal and wood business similar to the one his father ran in New York City. He also sold oats, corn and bran and was the cashier of a bank.

These two houses, essentially an eastward extension of the residential development on Main Street, were featured on two contemporary postcards, one of which had a note about them being in "modern" styles.

A local paper reported in 1907 that Dennis Homan had acquired directly from Mrs. Ostrander the first lot on newly-laid out Ostrander Avenue, number 127, immediately behind the Preston and Howell houses. [9] Homan was a 26-year-old duck farmer, the son of George Homan, one of Riverhead's four cigar manufacturers.[10] However, a home was not built on this parcel until 1958. But, other homes quickly appeared on the new Avenue.

The two-and-a-half-story three-bay hip-roofed Colonial Revival with a wrap-around porch at numbers 130-132 was probably built by Mrs. John W. Reeves before1908, the year of hear death. She was a widow of a wealthy farmer, who apparently decided build a bigger house than her previous one on Second Street. By 1920, this house belonged to Otis G. Pike, the secretary and treasurer of a bank. This was the birthplace and home of Otis G. Pike, Jr., who represented the East End in Congress from 1961 to 1979. It is still in the Pike family in 2015.

The two-and-a-half story Queen Anne with wide front porch across the street was also built about 1910. According to the 1916 map it was owned by Horace H. Williamson, the owner and editor of the *Riverhead News*, the area's Democratic paper and one of the predecessors to the current *News-Review*.

The two-and-a-half story Colonial Revival at number 138, like all the homes on Ostrander, with a full front porch, was also built about the same time. It was likely built by F. Porter Howell, a Calverton duck farmer, who like many in that business choose not to live on the odoriferous farm. He was also a bank director. Number 146 next door, also with a full front porch, was built in 1912, was also owned by F. Porter Howell on 1916 map. This was probably constructed for a family member or rental, on a parcel carved out of the lot of his house next door. In1920 it was occupied by by a female Scottish-born music teacher.

During the same period, the 1869 Italianate was moved from Main Street to 149 Ostrander and became the home of Kirk Bagshaw, a clerk in the County Treasurer's Office. The full width front porch was likely added at this time.

During these same decades, the new eastward extension of Second Street and newer sections of Maple and Union to the north became prime locations for new construction. On the newer section of East Second, homes went up on 315, 328, 332, 414, 422 and 425. Most of these were some variant on the Colonial Revival styles popular in those decades. As usual, their occupants were also an eclectic mix. At 315 was Ezra Young, a trucker from an old North Fork family; 332 was the Pennsylvania-born jeweler William H. Burnwite; next door at 328 was a smaller but similar house that Burnwite probably built as a rental; further east at 414 was Everett Leek, a stationary engineer at the county jail; beyond him at 422 was Charles Howell, a school principal turned insurance agent from another old North Fork Family and finally another member of the Howell family across the street at 425

Another boomlet took place on Maple Avenue. At 147, Horatio F. Buxton from Rhode island owned a general store. Other new homes went up at 204, 212, 218, 226, 305, 329-31, 340 and 349. The lower numbered ones (nearer Main Street) were substantial homes, generally Colonial Revival in inspiration, some possibly built on speculation. The ones in the 300s were generally smaller, probably mostly built as rentals.

But, perhaps the most interesting story is 329-31, a two-story cross- gable Colonial Revival owned by S. Goldman on 1916 map. Shephard Goldman was a Russian Jew whose children were born in this country starting in 1906. He was a butcher and owned his own slaughterhouse. He became one of the founders of Riverhead's Jewish synagogue. Another interesting house, 422 East Street,

was built by the Swiss-born manager of a salting house, William Carlson. Also on East were two small houses at 215 and 426.

Union Avenue showed a similar pattern. Here the most interesting house in the period is Craftsman bungalow with a dominant front gable dormer. It was owned Owned by T. Skidmore on the 1916 map. On the 1910 census, Theodore Skidmore was 66 years old, and a sash and blind maker. He was a son of Luther Skidmore who founded the company, one of Riverhead's biggest businesses. He was also the brother of George H. Skidmore, Riverhead's leading architect. Perhaps it is not surprising that this house is more stylistically pure and up-to-date than many of the other homes built during the period. More conventional Colonial Homes went up at 203, 204 and 210 Union Avenue.

The first two decades of the twentieth century saw numerous infill projects in the older section of East Second and nearby cross streets, sometimes as the result of building on previously empty lots, sometimes replacing older homes and other times the result of subdivision of larger yards of older houses. Amongst these houses is the two-story hip-roofed residence with Queen Anne massing built by lawyer Jetur Hand at 17 East Second Street. Further down Second, numbers 33 and 55 were built on what had been the back yard of a home on First Street. Both houses show a combination of Queen Anne and Colonial Revival influences. Number 33 belonged to George Hill Moore, born in 1886, he was an undertaker according to the 1920 census. He was third generation in one of Riverhead's oldest businesses, a gravestone and monument company that still operates on Griffing Avenue.

Perhaps the most spectacular home built in this time period is the 1905 Northridge-Price house at 46 East Second. This three-story cross-gable Victorian Shingle Style house features both round and hipped turrets and a porte cochere. It was designed by William Sidney Jones for August Price. Jones was an assistant who continued the practice of Riverhead's leading architect, George Skidmore. Price was a Brooklyn Attorney, who married a local woman but lost the house by 1919. Later it became the home and offices of Dr. John Northridge, a prominent local pediatrician. The design borrowed many Skidmore details from the Fishel house (since demolished) one of Riverhead's finest on East Main Street and also from the nearby 1907 First Congregational Church, a joint Skidmore-Jones design.

There was also scattered building elsewhere, such as 13 Northville Turnpike, 169 Roanoke and 41 Third.

1920s & 30s

After a break for World War I, construction continued at a brisk pace in the 1920s with at least 17 more homes built in the district during that decade. Some of these were high end, such as the three-story Colonial Revival built by Dr. Hallock Luce at 21 East Second Street on an infill lot. His father, a Northville farmer, thought him too spindly for that occupation, so sent him to medical school. Bron in 1892, he was a graduate of Amherst College and Columbia Medical School. He became a general practitioner. He initially practiced in Jamesport, but moved to Second Street in 1925 when he rented the Vail house on the corner. According to period newspaper accounts, he acquired the old Gilbert Aldrich residence in March of 1927, had it torn down, acquired 17 feet from the Hand family to the west and built a "handsome new residence" which he moved his family into in September 1927. He was one of the principal organizers of the effort to create Central Suffolk Hospital in the 1950s. He practiced medicine in a suite of rooms in the wing to the right if his Second Street home until just a few weeks before his death at age 82 in 1975. He delivered over 6,000 local babies in his first 40 years of practice, with more to come in his final decades. He was known for never sending out a bill in his life, but rather relying on his patients to pay him when they could.[11]

Just down the street, at 59, is the Colonial Revival Cape Cod with twin front gabled dormers built on what had been the back yard of the Blydenburg home on First Street. At the other end of the district, the two-story side-gable gambrel trimmed Colonial Revival was added to the row of fine houses at 139 Ostrander in 1928.

The biggest spurt of building was along Maple Avenue, with new houses going up at 143, 225, 317, 323, 334 and 336 -- most in variants of the Colonial Revival styles (including a couple of Four Squares) popular in the period. Another standard Colonial Revival Four Square appeared at 111 Northville Turnpike.

This decade saw the beginning of non-residential intrusions into the district. The 1850s Vail House that originally stood at the corner of Second and Roanoke Avenue was moved slightly to the south to make way at 220 Roanoke for the three-story brick Federal Style Odd Fellows Lodge designed by August H. Galow. Note the trademark diagonal brick panels under the third story windows, similar to those on the Commercial Building (Peconic and E. Main) also by Galow. Town Hall also occupied the first floor and the police department was in the basement until 1976.

The rather generic two-story office building at 206 Griffing was also built in this decade, according to the town accessors' records. although it appears a couple of decades newer.

1930s

The intrusion of non-residential buildings continued in the 30s with two notable structures. The first is the 1931 former headquarters of Riverhead Fire Department at 24 East Second Street. Designed by William Sidney Jones who had carried on the Architectural practice of George H. Skidmore after Skidmore's death in 1904, this two-story brick Dutch Revival with limestone voussoirs corbels, ornamental gable end parapet copings and large octagonal bell cupola. It replaced an older fire house on the same site built some time after 1873. The building was approved early in 1929, just before the stock market crash, but not completed until early 1931, after some difficulties with the $50,000 bond that was issued to pay for it.[12] The original individual arched garage door openings have long since been combined for wide overhead doors to accommodate modern fire trucks. A house next door was demollished and a two-story addition was built sometime before 1975.

At 21 West Second, the former Post Office building, a one-story Colonial Revival with Federal influences and monumental stone steps was erected as part of FDR's Works Progress Administration, as was the nearby Pulaski Street School (a little outside the district) completed a few years later.

With the Great Depression, residential construction slowed markedly, with only five homes built in the 1930s. Most of these were modest such as the one-story hipped-roof National Folk cottages at 141 Union Avenue and 212 East Avenue. The most interesting home from the period is the one-and-a-half-story side-gable Tudor cottage at 223 East Street built in 1935 according to Assessor's Office records.

Post World War II

After World War II, residential construction came to a virtual standstill. Assessors office records date the Colonial Revivals at 311 East and 312 Roanoke to 1945 and 1948 respectively, but stylistically both look at least a couple of decades older. The only other new homes were at 410 East (1948), 145 Union (1951), 51 East Second (1959), 150 Union (1960), 49 Third (1960) and the last new home built in the district at 38 Third (1989). Assessors records date a couple of other homes to this period, but these are probably errors. There were also two small office structures,15 West Second (1965) and 117 Ostrander (1958). As the downtown business district reached its peak, the lack of residential construction nearby may seem odd, but there were very few available lots and the automobile made it easier for new construction to move further out from the downtown core where post-war style subdivisions on former farmland where possible.

No residences have been constructed since the turn of the 21st century, but there is a new group home at 226 East Street built in 2007 to fit in with the newly designated local historic district. It incorporates the Greek Revival doorway of

the 1840s home that previously stood on that site. And finally, the Italianate structure at 23 West Second which appears to date from the mid-19th century is actually the last addition to the Law Firm offices of Twomey Latham Shea & Kelly, built about 2005. It is an exact replica of the pre-1876 Tuthill-Vail house that was moved from the site to the east in the 1930s in order to build the Post Office and later was demolished by the law firm to build this replica .

SELECTION CRITERIA

The area of Riverhead selected for the following survey is directly adjacent to the already designated Main Street National Register District to the south, which is primarily commercial in nature. While working through the Second Street district selection process, sponsors expressed the importance of understanding that this district was predominantly a residential one. This had developed in a time period spanning a century between the 1840s and 1940s, as a neighborhood for the professionals, merchants, laborers, ship builders, craftsman and new immigrants alike, all of whom worked downtown. The Second Street neighborhood is comprised of structures that, for the most part, have also remained residential in modern usage. For this reason it has a distinct flavor all its own. It should, by this logic, be the residential counterpart to the commercial Main Street.

The nearly 150 significant structures in this neighborhood include everything from large ornate Queen Anne Victorian homes with complex roof forms to modest Colonial Revivals, Italianate, Greek Revival, Capes and many simple National Folk style cottages. Some exhibit influences from combinations of these period styles. Though many were interpretations of European styles of the day the architecture is all primarily domestic. Overall the resulting character, as a conspicuously residential district, is a theme that is apparent to even the most casual observer.

BOUNDARY

The boundary for this district (encompassing just under 35 acres) was a natural progression in the process that has been underway for over a decade. To the south is the Main Street National Register District. The northern boundary of that district essentially coincides with the southern boundary of the subject Second Street District. The northern boundary of the Second Street District is derivative of the locally designated Riverhead Downtown Historic District but essentially offsets one block north to also include contiguous homes north of the railroad, along the southern spur of Northville Turnpike, that meet the selection criteria. This northern boundary is a stretch of the turnpike that was originally known as Fourth Street. The east and west boundaries run along the north/south streets (Griffing Avenue and Ostrander Avenue) that are at each end of Second Street. This area of focus covers a specific contiguity that experienced a definitive and formative growth spurt, speaking directly to the historic character of residential Riverhead. The actual path of the boundary articulations relates to the contiguous groupings of characteristic and contributory homes along these streets. A secondary but also vital criteria was to include as many of the period structures, with significant history or attributes, as possible within the guidelines.

METHODOLOGY

Undertaking this Second Street survey is just one part of a continuing effort for the area. Previous endeavors have included the Main Street National Register District immediately to the south (approved in 2012), which is predominantly commercial in nature, and the Downtown Riverhead Historic District (locally designated by the Town of Riverhead in 2006). The Main Street effort afforded qualification for 37 different contributing resources to receive rehabilitation tax credits, and contributed significantly to much needed ongoing town revitalization efforts. Prior to that the Riverhead Landmarks Preservation Commission (LPC) and the Town took on the larger Downtown Riverhead Historic District, which is an area that encompasses the entire downtown (effectively the Main Street and Second Street districts combined). This district is quite sizeable, boasting 220 contributing structures that range from the 1840s through the early 1960s.

The LPC and town leaders have worked tirelessly to raise awareness and find ways that provide incentives for developers to preserve and restore instead of demolish and rebuild. They have worked closely with the residents to help foster a culture that values such a colorful and storied past. These past endeavors were both accompanied by strategic advance communication initiatives, that proved very effective keeping the town board and property owners apprised of the potential associated benefits and opportunities. Rewards for their efforts have included

unanimous approvals for both of these nominations, as well as successful historic restoration of several locally prominent structures (including the 1933 Art Deco Suffolk Theater and the 1951 Woolworth Building) that may have otherwise been lost. This campaign, the potential tax credits and the Landmark Code for the local district appear to have already influenced one owner in the proposed Second Street district. 428 East Main Street (EM-04 in the survey), it was believed, was a candidate for demolition. The prominent local developer seems now intent on a major restoration as a destination restaurant.

The Second Street effort has been sponsored by The Town of Riverhead and the LPC. Funding was provided under a New York State D.E.C. Brownfield Opportunity Area Grant. Nelson Pope & Voorhis, LLC (NPV) and Hawkins Webb Jaeger, PLLC (HWJ) have been engaged as planning and survey consultants, to aid in the survey and mapping work as well as preparation of the survey and report documentation.

The majority of fieldwork for this project was conducted in July and August of 2014. This was done in the form of on-site visual observation, and photography from the public right of way. Base mapping was prepared utilizing Geographic Information Systems (GIS), with parcel database information and original boundary provided by the Town of Riverhead. The GIS is also the tool that allows us to calculate the 1,510,214 s.f. (34.67 ac.) area for district boundary. The parcel database is provided through Suffolk County Real Property by license agreement with the Town of Riverhead – and sublicense agreement with NPV as consultant to the Town. The Town also provided a preliminary table of points identifying all residential structures with potentially historic significance. These points, the preliminary boundary and all parcel outlines were mapped using a 2013 aerial photograph as the base. The data was then merged with the SHPO Building-Structure Inventory for the area. The boundary was also slightly modified to incorporate several additional structures believed to have the potential for historic significance. The parcel identification numbering convention was designed to emulate that of the already established SHPO inventory. Map points have been tagged to correspond with the data and photographs in an EXCEL spreadsheet. The spreadsheet format is based on examples of previous surveys provided by SHPO. Initial data used was based upon existing information provided by the LPC and supplemented through fieldwork and research.

RECOMMENDATIONS

The process of surveying, compiling, and reporting such a comprehensive collection of historical data has provided a clear and concise yield that was entirely predictable. The obvious benefit is simply that each of the individual participants comes away with a better understanding of the significance of the subject neighborhood, and thereby a better understanding of the associated historical value. Each participant comes away with a clearer understanding of the process and protocol required to establish such a district and the importance of doing so. The unexpected benefit however, might be that the collective knowledge associated with this kind of team effort is greater than the sum of its individual parts. It will generally be far more consistent and effective tool when disseminating information to the community. The collective knowledge will offer more intuitive inspirations for specific methods of informing and educating the decision making public.

The next steps toward historic preservation have already begun with a robust advance outreach campaign, to inform all of the residents that will be affected. This should include a simple, plain language, bullet point outline illustrating some of the obvious benefits already gained by the way of the Main Street National Register. In a small community, such as this, it should include town meetings, mailings and a personal, boots on the ground, outreach campaign through the LPC, local merchants and civic leaders alike. All available local media (print, and electronic) should be engaged to whatever extent possible. This should all be done in advance of any official notifications or potentially intimidating legalese. It will be important to preemptively dispel any misconceptions the residents may have about how a National Register designation will affect them. Experience has taught us that misinformation is our biggest adversary. A well informed public will be our greatest ally.

BIBLIOGRAPHY

Wood Brick and Stone – A Walking and Driving Tour of Historic Downtown Riverhead, Copyright 2008 Riverhead Landmarks Preservation Commission
Seeking the Past – Writings from 1832-1905 relating to History of the Town of Riverhead, Copyright 2004 Riverhead Free Library, Edited by Tom Twomey
History of the Town of Riverhead Written by Hon. George Miller in 1876
Riverhead Written by R.M. Bayles in 1882
Riverhead: The Halcyon Years1861-1919 by Thomas M. Stark Copyright 2005
Map of Suffolk County, L.I. NY. From Actual Surveys by J. Chace Jr. Published by John Douglass 1858
Atlas of Long Island, NY. From Recent and Actual Surveys by Beers Comstock & Cline 1873
Atlas of Suffolk County, L.I., NY., Vol. II New York: E. Belcher Hyde, 1909
Atlas of a Part of Suffolk County, L.I., NY. South Side Ocean Shore Vol. II New York: E. Belcher Hyde, 1916
Town of Riverhead Tax Assessor's Archives
Downs, Arthur Channing, Jr, ed. *Riverhead Town Records, 1792-1886.* The Long Islander, 1967.

.

Fig. 1

Detail from 1858 Chace "Map of Suffolk County" showing part of downtown Riverhead. Note that Second Street stopped at East Street, and there were no cross streets further east at that time. The approximate southern boundary of the proposed district is shown as a dashed red line.

Fig. 2

Exceptlt from the 1873 *Atlas of Long Island* by Beers Comstock & Cline showing the Second Street area.

Fig. 3.

Exceptlt from the 1909 Belcher Hyde map showing the Second Street area.

[1] *Riverhead Patch*, June 17, 2011. The Langhorn family lived at 356 Maple Avenue, in a house no longer standing.
[2] Excludes five properties that are either vacant or parking lots.
[3] Stark, p. 6.
[4] *Riverhead Town Records*, p. 338
[5] *Riverhead Town Records* 503-4.
[6] *The County Review*, March 31, 1905, p. 1.
[7] Stark, p. 6.
[8] *New York Tribune*, June 12, 1894, p. 7.
[9] County Review, July 26, 1907
[10] Stark, p. 27-8.
[11] *County Review*, March 24, 1927, March 31, 1927, May 19, 1927, June 25, 1927, September 19, 1927; *Long Island Traveler-Watchman*., August 14, 1975
[12] *County Review*, February 12, 1931.

22-May-15

RIVERHEAD SECOND STREET NEIGHBORHOOD SURVEY

Image	SCTM	No	pre	st	suf	Use	ID_NO	Original Condition (Y/N)	Detached Structures	Materials	Foundation	Additions	Circa	Contributory (Y/N)	Historic Significance	Architectural Notes:
	128.-5-25.1	24	E	Second	St	Police and Fire Protection, Electrical Signal	E2-01	Yes	Garage	Brick	Not Visible	Rear	1931	yes	Originally headquarters of Riverhead Fire Department. Designed by William Sidney Jones who had carried on the Architectural practice of George H. Skidmore after Skidmore's death in 1904	2 story brick Dutch Revival with limestone voussoirs (jack arches), corbels and ornamental gable end parapet copings. Large octagonal bell roofed cupola with bronze wind vane and look-out walk with railing. Individual arched garage door openings have long since been combined for wide modern doors to accommodate modern fire trucks. A later 1 story addition was built sometime between 1939 and 1975
	128.-5-30	36	E	Second	St	One Story Small Structure - Multi occupant	E2-02	Partially	No	Vinyl Siding	Brick	No	1900* House shown on 1858 map this location. 2 sty house appears on 1916 map	yes	Owned by Frank C. Cooper on 1916 map. Mr. Cooper was a local shoe store owner.	2 story asymmetric cross gable Queen Anne massing. All Queen Anne windows replaced with modern insulated double hung. Original friezes and scalloped shingles gone. Belt flares are replicated in modern materials
	128.-5-31	46	E	Second	St	Three Family Year-Round Residence	E2-03	Yes	Garage	Cedar Shingles	Not Visible	No	1905*	yes	Price Northridge House: Designed by William Sidney Jones for August Price. A Brooklyn Attorney, Price married a local woman but lost the house by 1919. Later offices of Dr. John Northridge, a local Pediatrician. Borrowed many Skidmore details from the Fishel house (since demolished)	3 story cross gable Victorian Shingle Style with round and hipped turrets. Faithfully maintained with cedar shingle siding, original frieze work crowns and flared gable with brackets. Clustered Tuscan columns carry entry pediment feature of full wraparound porch with columns, a Porte Cochere, and shingled modesty panels. Round pavillion at turret side of porch.
	128.-5-32	54	E	Second	St	One Family Year-Round Residence	E2-04		No	Painted Shingles	Concrete	No	1930*	yes		2 1/2 story 3 bay simple side gable Eclectic Colonial Revival with cedar perfection siding and a gabled asymmetrical roof over brick front porch. 6/1 double hung windows remain, storms added later.
	128.-5-34	62	E	Second	St	Multiple Residences	E2-05	No	(2) Detached Apartments	Vinyl Siding	Concrete	Yes	1928* House shown on 1858 map this location. 2 sty house appears on 1916 map	yes	Originally owned by C. Lockwood then by G.O. Wells after 1873. Clark Lockwood, born in Connecticut c.1804, listed in the 1860 census in Riverhead. In 1870 he was a clergyman in Southold Town, in 1880 he was in Islip. James C. Millard, a bookeeper, born about 1845, and his wife Sarah lived here in the 1900 and 1915 census. Owned by M. Millard after 1916	2 story 3 bay front gable Italianate with flat winged rakes.1 story original east wing, possibly older than 2 story element, has changed in size over the years according to historical maps. now vinyl clad - latest front addition post 1976. 6/6 windows gone
	129.-3-20	314	E	Second	St	Two Family Year-Round Residence	E2-06	No	Garage	Asbestos Shingles	Stucco	? Side	1934*	yes		2 1/2 story front single hip on clipped gable Eclectic Colonial Revival original 6/1 double hung windows with neo classical tuscan detailed entry portico gable. Two later 1 story additions
	129.-3-21	324	E	Second	St	One Family Year-Round Residence	E2-07	No	Garage	Asbestos Shingles	Brick	Rear	1910*	yes	Owned by Hubbard on 1916 map. Roscoe Hubbard, born about 1883, was the delivery man for a biscut company.	2 1/2 story side gambrel Eclectic Colonial Revival with twin front gabled dormer and rear shed dormer. Full front porch later enclosed. Detached 2 story multi-bay vernacular garage added later.

Image	SCTM	No	pre	st	suf	Use	ID_NO	Original Condition (Y/N)	Detached Structures	Materials	Foundation	Additions	Circa	Contributory (Y/N)	Historic Significance	Architectural Notes:
	129.-3-22	328	E	Second	St	One Family Year-Round Residence	E2-08	Yes	Shed	Wood Shingles	CMU	No	1912*	yes	Owned by Wm. H. Burnite on 1916 map sharing single lot with structure now shown as 332 E 2nd. This was probably an income unit for Burnite. In 1925 it was rented to Charles Cowan, the manager of a grocery store.	2 story asymmetric front gambrel Eclectic Colonial Revival cedar perfection clad with shed dormer one side. One story rear shed addition later enclosed for porch. Original 2/1 double hung windows.
	129.-3-23	332	E	Second	St	One Family Year-Round Residence	E2-09		Garage	Unknown Shingle	Concrete	No	1914*	yes	Owned by Wm. H. Burnite on 1916 map sharing single lot with structure now shown as 328 E 2nd Burnite owned a jewelery shop on the west side of Roanoake Avenue. He and his wife moved from Harrisburg, PA about 1903 and was living here in the 1910 census.	2 story asymmetrical cross gambrel Eclectic Colonial Revival. Hip dormer opposite cross gambrel, center front gabled entry vestibule. Clipped sw corner, prow shaped oriel se corner, yankee gutters and some 2/2 windows remain.
	129.-3-24	404	E	Second	St	One Family Year-Round Residence	E2-10	No	Shed	Unknown Shingle	Concrete	Front vestibule was part of open porch	1939* House shown on 1916 map	yes	Owned by Charles Pettens on 1916 map. Pettens was a carpenter born in Pennsylvania.	2 1/2 story front gable with rear single story gable Eclectic Colonial Revival west side glass porch later enclosed. Front entry asymmetrical gable vestibule and metal roofed french 2 window bay balancing front vestibule. Double hung windows remain, only attic window is original 2/1
	129.-3-25	414	E	Second	St	Two Family Year-Round Residence	E2-11		Garage	Asbestos Shingles	Not Visible	No	between 1905-1916	yes	Owned by S.E. Leek on 1916 map. Everett Leek, born about 1885, was the stationary engineer at the county jail at the other end of Second Street.	Front gable 2 1/2 story Eclectic Colonial Revival with 2 story rear wing and 1 story west wing. Asymmetrical full front and part side wrap around queen anne detailed wd porch, attached 1 car garage
	129.-3-26	422	E	Second	St	One Family Year-Round Residence	E2-12	No	Shed	Vinyl Siding	Brick / CMU	Entry vestibule	between 1905-1916	yes	Owned by Mrs. C. Howell on 1916 map. Charles H. Howell moved to Riverhead about 1880 from Franklinville. He was principal of the Riverhead Union School from 1880-1888, and also ran an insurance agency. Old North Fork family.	1 1/2 story front gable Eclectic Colonial Revival cottage 1 bay wide with side shed first addition and entry vestibule
	129.-3-19	315	E	Second	St	Two Family Year-Round Residence	E2-13	Yes	Garage two bay hipped roof	Cedar Shingles painted	Brick	No	1910*	yes	Owned by Ezra Young on 1916 map. Young was listed in the census as a truckman with his own car [i.e., truck]. Old Riverhead family.	2 1/2 story cross gable Eclectic Colonial Revival with Entry at main gable. Original configuration double hung windows with dated alum. Storms. Full wraparound asymmetrical front and side roof over porch, later enclosed. Trimmed and appointed with Shingle Style and Queen Anne influences.
	129.-2-40.2	225	E	Second	St	One Family Year-Round Residence	E2-14	partially	No	Vinyl Siding	Rock faced concrete block	No	1930*	yes		2 story front gable single bay Colonial Revival on original rock faced concrete block foundation. Front low hipped sun porch later enclosed. Side Entry Portico Gable with spindle post columns over brick stoop. Double hung insul. replacement windows with faux divided lites
	129.-2-18	151	E	Second	St	One Family Year-Round Residence	E2-15	no	No	Vinyl Siding	Concrete	Yes	1959*	no	On property subdivided from 1870 house adjacent on corner of Maple	1 story multi-gable Eclectic Minimal cottage. New decorative synthetic traditional style siding, modern insulated double hung windows

Image	SCTM	No	pre	st	suf	Use	ID_NO	Original Condition (Y/N)	Detached Structures	Materials	Foundation	Additions	Circa	Contributory (Y/N)	Historic Significance	Architectural Notes:
	129.-1-1	59	E	Second	St	One Family Year-Round Residence	E2-16	yes	Shed	Stone and shingle siding	Concrete	No	1920*	yes	On property formerly of C.M. Blydenburgh shown already subdivided on 1916 map	1 1/2 story side gable Colonial Revival Cape Cod with twin front gabled dormers. Simple posted front gable Portico over brick stoop. Front random rectangular granite veneer.
	128.-6-43	55	E	Second	St	One Family Year-Round Residence	E2-17	Yes	Garage two bay side gable	Cedar Shingles	Not Visible	No	1900* House probably built after 1909 map	yes	Owned by M. J. S. Davis on 1916 map	2 1/2 story cross gable Queen Anne with Entry at subordinate cross gable. Original configuration modern replacement double hung windows . Full wraparound asymmetrical front and side roof with square columns over raised wood porch. Recently trimmed and appointed with applied Victorian Stick style banding, barge boards and diagonal sticking.
	128.-6-42	49	E	Second	St	Two Family Year-Round Residence	E2-18	No	Shed	Asbestos Shingles	Stone	Multiple rear	1840s or 1850s	yes	Possibly one of the oldest houses in downtown Riverhead. Allen T. Terrell, born in Connecticut c. 1825, in 1860 was a telegraph operator at railroad station, later was trackmaster of entire LIRR system, also a produce dealer and merchant. Owned by A.T. Terrell on 1873 map and later by A. Terrell estate through 1916.	1 1/2 story front gable with Greek Revival influence. Large frieze band and corner pilasters. Asymmetrical full front and side wraparound wood low porch with low slope hipped roof and Tuscan columns. Rear 1 story near flat-roof wing of near original era. At least one low eave architypical "belly" window remaining. Many original six-over-six windows on first floor. Some Greek Revival doorway elements remain.
	128.-6-41	43	E	Second	St	Multi-Family Year-Round Residence	E2-19	No	2 story multi-bay Garage	Cedar and asbestos shingles	Not Visible	Rear / Car Port	1870*	yes	Owned by Wm. Swezey on 1873 map William Sweezy, born 1847. Old Riverhead family. Ran men's clothing store. Also owned largest ice houses in town, capable of storing 6,000 tons in 1906. Shipped ice to NYC. Nephew of Perkins brothers, Riverhead's wealthiest family. Later owned by John Bagshaw on 1916 map. Bagshaw, born c. 1858 in England, was an insurance and real estate agent. Most additions built after that date. In 1920, his son Kirk Bradshaw was a clerk in the county treasurer's office.	Large 2 1/2 story cross gable Colonial Revival with asymmetrical front gable dormers. Multiple mixed vernacular modifications of unknown era. Low slope asymmetric front roof over porch with twin front pediments and integrated with east side porte-cochere. Queen Anne influence spindle-work and columns. Large rear gambrel addition. Some single pane 2/1 double hung windows remain. Original mid-19th century six-over-six windows on sides.
	128.-6-40	33	E	Second	St	One Family Year-Round Residence	E2-20	Yes	3 bay hipped roof Garage with shed roof addition	Wood Clapboard	Concrete	No	1900*	yes	Structure shown on the property in 1873 owned by Charles Hallock. Charles M. Hallock, from an old Riverhead family, was in the 1880 census as a 29-year-old printer in this area. A different structure matching current configuration shows on 1916 map owned by G.H. Moore. George Hill Moore, born in 1886, was an undertaker according to the 1920 census. He was third generation in one of Riverhead's oldest businesses, a gravestone and monument company that still operates on Griffing Avenue.	2 1/2 story front gable Colonial Revival with asymmetrical cross gable. Full asymmetrical wraparound raised wood porch with modesty panels and Queen Anne influence column filigree. Original arch top front attic window. Double hung 1/1 replacement windows with later applied vernacular faux shutters
	128.-6-39	29	E	Second	St	One Family Year-Round Residence	E2-21	Yes	Garage	Wood Shingles	Not Visible	No	ca. 1850	yes	This house likley dates to the 1850s and was originally a 1 1/2 story front gable Greek Revival. Owned by A. Anderson on 1873 map. Later, probably around 1900, was enlarged to a full 2 stories. In 1914, it is still in the Hockeiser familiy, which operated a variety store on Main Street. On 1916 map, property owned by A. Douglas	2 1/2 story cross gable with dominant front gable. Queen Anne influence with asymmetrical wraparound roof over raised wood porch and modesty panels. Queen Anne style spindles and ornamental brackets. Original 2/2 double hung windows

Image	SCTM	No	pre	st	suf	Use	ID_NO	Original Condition (Y/N)	Detached Structures	Materials	Foundation	Additions	Circa	Contributory (Y/N)	Historic Significance	Architectural Notes:
	128.-6-38	21	E	Second	St	Converted Residence	E2-22	Yes	Garage	Cedar Shingles	Concrete	No	1927*	yes	Built by Dr. Hallock Luce, a general practicioner. His father, a Northville farmer, thought him too spindly for that occupation, so sent him to medical school.	3 story side gable Colonial Revival with twin bold pediments over double window attic dormers. 1 story low hipped wing on east end, hipped roof over porch on west end. Shed roof entry porch at rear. Just off center Adam style curved vault gable over front entry brick stoop. 6/1 double hung windows mostly remain.
	128.-6-35	17	E	Second	St	Two Family Year-Round Residence	E2-23	Yes	2 bay gable Garage	Cedar Shingles	Not Visible	No	1905	yes	Jetur ("Sons of Ishmael") J. W. Hand built this structure. Born c, 1870 in Bridgehampton, read law with Timothy Griffing and started his own law practice in 1897.	2 story hipped Queen Anne massing with dominant front and east side gables. Asymmetrical full front and east side low slope hipped roof over raised wood porch with plain Tuscan columns. Strong Greek revival influenced pediments with large frieze work and dentil moldings as well as ornamental window lite divisions
	129.-3-27	425	E	Second	St	One Family Year-Round Residence	E2-24	Yes	No	Vinyl Siding	CMU	No	pre-1916	yes	Owned by Robert Howell on 1916 map situated between properties then owned by C. H. Howell and Mrs. C. Howell.	1 1/2 Story symmetrical center chimney cross gable with full front low hipped roof over enclosed porch.
	126.-4-50	422		East	Ave	One Family Year-Round Residence	EA-01	Yes	Garage	Cedar Shingles	Brick	No	1910*	yes	Owned by William Carlson on 1916 map. E. William Carlson, born c. 1876 in Sweden, was the manager of a salting house according to the 1910 census.	2 1/2 story front gable symmetrical Colonial Revival with full front low hipped roof over glass enclosed porch. 2/1 double hung windows mostly remain with later alum. storms. Front porch windows are apparent later 6/1.
	128.-4-19	414		East	Ave	Two Family Year-Round Residence	EA-02	No	No	Vinyl Siding	Not Visible	Rear	pre-1873	yes	House on property shown owned by Hugh Dougherty in 1873, and Walsh on 1916 map. John (born c. 1825) and Peter (born c. 1833) Walsh are show in the 1880 census in this area. Both were Irish immigrants. This end of East Avenue was a small Irish colony at that time.	1 1/2 story side gable Colonial Revival with one story center single gable rear wing. A few 6/6 double hung windows remain. Later enclosed front shed roofed sun porch. Frieze windows on 2nd floor have all been closed and sided over.
	128.-4-20	410		East	Ave	One Family Year-Round Residence	EA-03	Yes	No	Vinyl Siding	Concrete	No	1948*	no		2 story front gable Colonial Revival triple over triple with off center simple square columned gable portico roof over brick front entry stoop. 6/6 double hung windows largely remain with alum storms.
	128.-4-21	406		East	Ave	One Family Year-Round Residence	EA-04	Yes	No	Cedar Shingles	Concrete	No	1900*	yes	Owned by Melvin on 1916 map	1 story hipped roof National Folk style bungalow with a single front hipped attic dormer for original twin four lite casement windows. Craftsman influenced open rafter tails and symmetrical front screen porch with modesty panels.
	128.-4-22	404		East	Ave	One Family Year-Round Residence	EA-05	No	Shed	Vinyl Siding	Concrete	No	1900*	yes	Owned by M. Benjamin on 1916 map	2 story hipped roof colonial revival with partial 1 story south side entry low hipped roof over glass enclosed porch entry. 2/1 double hung windows largely remain with later added alum storms. Some remnant open rafter tail craftsman details apparent.

Image	SCTM	No	pre	st	suf	Use	ID_NO	Original Condition (Y/N)	Detached Structures	Materials	Foundation	Additions	Circa	Contributory (Y/N)	Historic Significance	Architectural Notes:
	128.-4-23	402		East	Ave	One Family Year-Round Residence	EA-06		No	Asbestos Shingles	Concrete	No	1870*	yes	Property part of larger lot owned by Silas Terry on 1873 map, and sub-divided current lot by M. Benjamin on 1916 map. Moses Benjamin, a druggist, lived on Main Street. This was probably a rental property.	2 story gable front and cross gable National Folk style with low slope front shed roof over low entry porch on slab. Low eave windows around 2nd floor of front wing, with 1/1 double hung original sashes remaining otherwise. Rear cross gable wing with shed roof rear porch may be later addition.
	129.-2-1	324-326		East	Ave	Multiple Residences	EA-07	No	(3) Add Structures. Garage w/ Apartment	Vinyl Siding	Concrete	Yes	pre-1873	yes	Owned by J.C. Knoess on 1873 map. John C. Knoess, born 1823 in Germany, was a taxidermist and tailor with a shop in his house. Owned by Radford on 1916 map	2 story low pitch hipped roof with apparent Italianate influences. Full narrow front width shed roof over wood entry porch with modesty panels and simple square post columns. Multiple functionally flat roofed 1 and 2 story later additions at rear and north side. existing double hung window configurations mostly remain but with replacement windows.
	129.-2-2	320-318		East	Ave	Two Family Year-Round Residence	EA-08	Yes	Shed	Vinyl Siding	Not Visible	No	pre-1873	yes	Owned by J.R. Vail on 1873 map, and W. Lutz on 1916 map. William Lutz was a tailor, born c. 1855 in Germany and immigrated to the U.S. in 1879.	1 1/2 story National Folk style front gable with low hipped roof later enclosed full width front porch showing later 6/6 double hung window pairs. Original likely 2/1 or 1/1 double hungs replaced with recent 1/1 insulated units. Low side eave windows with 6 lite sashes. Apparent original yankee gutter on front porch remains.
	129.-2-3	316		East	Ave	Three Family Year-Round Residence	EA-09	Yes	Shed	Cedar Shingles	Brick	No	pre-1873	yes	Owned by J. Howser on 1873 map, John Housner was a gunsmith with a shop in his house. Owned by W. Lutz on 1916 map.	2 1/2 story Colonial Revival front gable with single north side subordinate cross gable and flat roofed full width rear wing. Full width front and south wraparound hipped roof raised wood porch. South side four window hipped roof bay. Italianate influence corbeled frieze both sides of rear wing. Tuscan columns w/railing around front porch.
	129.-2-4.2	308		East	Ave	One Family Year-Round Residence	EA-10	No	No	Vinyl Siding	Not Visible	Rear	pre-1859	yes	Was the St. John's Mission, predecessor to the first Catholic Church in Riverhead. Purchased by John Walsh in 1859, then aquired covertly by Bishop McLaughlin for 280$ to use as the Mission. The current property configuration purchased in 1864	1 1/2 story front gable National Folk style cottage with rear clipped gable gable 1 story wing. Front full width shed roof on spindle posts over raised wood porch. Single window shed dormer on south side of main roof. All replacement 1/1 double hung insulated windows
	129.-2-4.1	306		East	Ave	Two Family Year-Round Residence	EA-11	Yes	No	Cedar Shingles	Brick	No	pre-1873	yes	Owned by G.O. Wells on 1873 map, and E. Wells on 1916 map. Elisha Wells, born 1844, was a carpenter from an old Riverhead family.	3 story front gable Queen Anne with north side cross gable. Smaller subordinate side gable opposite, sits centered over first floor hipped bow . Both asymmetrical to house. Front and side facing single window shed dormers (2) on the third floor. Full front width shed roof over raised wood porch with wood spindle posts fretwork and railings. Apparent original soffit brackets remain.

Image	SCTM	No	pre	st	suf	Use	ID_NO	Original Condition (Y/N)	Detached Structures	Materials	Foundation	Additions	Circa	Contributory (Y/N)	Historic Significance	Architectural Notes:
	129.-2-5	302		East	Ave	One Family Year-Round Residence	EA-12	No	No	Wood Shingles	CMU	Yes	pre-1873	yes	William Elton on 1873 Map.Owned by J. Elton on 1916 map. William Elton was born in London in 1826, emmigrated to the U.S. is 1844 and established a boot and shoe making business in Riverhead the same year. Later this became a shoe store. His son, James Elton was in the fish oil business in 1880. Born 1855, became a merchant and bank director. He took over his father's shoe business in 1885, in 1895 became manager of the Long Island and New England Steamboat Company, and in 1904 with Henry Wells, acquired a coal company. His son Charles was living here in 1920, a salesman for a coal company. This house was likely a little further south originally, but was moved so that Second Street could be extended through this area about 1905.	2 story front gable 3 bay with rear offset parallel gable addition. Possible Italianate original influence. South side 2 story bow. Front full width low hip roof over screen porch. One Queen Anne style ornamental rectangle window on the south side other 2/2 double hungs remain in distress with alum storms. Stained glass window over stairway.
	129.-2-6	224		East	Ave	Two Family Year-Round Residence	EA-13	No	Shed	Cedar Shingles	Not Visible	No	2007	no	1840s house on this lot was owned by Charles Blume on 1916 map. Original structure demolished in 2007. Only the Greek Revival dorway was saved and incorported into the current structure.	New construction 2 story cross gable Colonial Revival with partial front partial side hipped roof over raised porch with wood railing. Well appointed in simple builder vernacular shingle style trim and cladding. Includes integrated accessibility ramp.
	129.-2-7	216		East	Ave	One Family Year-Round Residence	EA-14	No	2 bay pyramidal hipped roof Garage	Vinyl Siding	CMU	No	1920*	yes	Owned by Jas. Elton on 1916 map. See EA-12 above	1 1/2 side gable National Folk style with flared front rake roof over full width raised enclosed porch. 2nd floor front center two bay shed dormer. Small rear off center shed addition.
	129.-2-8	212		East	Ave	One Family Year-Round Residence	EA-15	No	1 1/2 bay front gable Garage	Asbestos Shingles	Concrete	No	1935*	no		1 story modern with hipped roof and non-descript inset entry. Rear shed roofed addition. 1/1 double hung corner windows.
	129.-2-9	208		East	Ave	One Family Year-Round Residence	EA-16	Yes	2 bay pyramidal hipped roof Garage	Asbestos Shingles	CMU	No	1930*	yes		2 1/2 story side gable with Craftsman influenced center 3rd floor shed roof dormer. Front full width hipped roof enclosed porch featuring off center entry opposite vernacular double hung flanking picture window unit. Rear first floor low hipped roof glass porch addition. 6/1 double hung windows mostly remain.
	129.-2-10	204		East	Ave	Three Family Year-Round Residence	EA-17	Yes	Hipped pyramidal roofed garage converted to cottage	Cedar Shingles	Not Visible	No	1860*	yes	Owned by F. Kline on 1873 map. Francis Kline was, born c. 1820 in Bavaria, was a shoemaker. Owned by C. Bunce on 1916 map. Charles E. Bunce opened a store in 1883 selling stoves, cooking utensils and dinner ware. He was also a plumber.	2 1/2 story 3 bay cross gable Italianate.Dbl. leaf front door with etched arch top glass . off center front entry in dominant gable end. Ornamental attic windows center in gables. South cross gable features ornate second floor paired window trim over fist floor hipped roof bow windows. Recently renovated with cedar perfection and scalloped shingles in the gable end.

Image	SCTM	No	pre	st	suf	Use	ID_NO	Original Condition (Y/N)	Detached Structures	Materials	Foundation	Additions	Circa	Contributory (Y/N)	Historic Significance	Architectural Notes:
	129.-1-3.1	215		East	Ave	One Family Year-Round Residence	EA-19	Yes	Garage	?	Not Visible	No	pre-1916	yes	Building appears on 1916 map as outbuilding on subdivided Blydenburgh property.	2 story 3 bay side gable with off center partial front entry shed roof over porch with spindle posts and railing. Off center 1 story rear gable wing with side entry spindle posted shed roof over porch. Mostly replacement 6/6 double hung windows except gable end attic square windows
	129.-1-2.1	223		East	Ave	One Family Year-Round Residence	EA-20	Yes	No	Stucco	Not Visible	Rear	1935*	yes		1 1/2 story side gable Tudor cottage. Off center steep gable entry vestibule and single front side offset 1 window gable dormer. Round top gable end window trim and ornamented rake boards. Flat roofed partial width rear addition.
	128.-5-33	311		East	Ave	One Family Year-Round Residence	EA-21	Yes	No	Asbestos Shingles	Concrete	? Rear	1945*	yes		2 1/2 story side gable Colonial Revival with full width shed roofed enclosed glass porch. Shed roofed rear addition partial width.
	128.-4-17	411		East	Ave	Residential Vacant Land	EA-22							no		Empty Lot
	128.-4-16	417		East	Ave	One Family Year-Round Residence	EA-23	no	Garage / cottage.	Vinyl Siding	Not Visible	Rear	1870*	no	Owned by John Lynch on 1873 map. John Lynch, born 1844 in Ireland, was a tailor in 1900 census. Owned by Ed Young on 1916 map. Edwin Young, born 1863, was a furniture maker	2 story low slope side gable Italianate 2 bay with full width front shed roof on original spindle posts and scroll cut brackets over porch on slab. Flat roof over 1st floor south side windowed bow. Multiple later rear additions
	128-4-15	425		East	Ave	One Family Year-Round Residence	EA-24	partially	No	vinyl siding	brick	no	1875*	yes	On property probably purchased from S.S Terry, owned by Wm. Brown on 1916 map. Brown lived on Main Road, so this was probably a rental.	1 1/2 story 2 bay front gable Italianate with full width front low slope hip roof on spindle posts and wood railings over raised wood porch. Low side eave windows. Transom window remains over front entry door. Most other 2/1 double hungs remain with alum storms. Rear flat roof wing with side parapets
	126-4-49	426		East	Ave	One Family Year-Round Residence	EA-25	No	No	vinyl siding	Not visible	possible rear	1873-1916	yes	Owned by the Estate of Downs on 1916 map	1 1/2 story steep slope cross gable National Folk style with possible Gothic Revival influence. 1 bay deep dominant side gable with larger rear gable wing and possible later rear roof height increase. Symmetrical configuration with small 2nd floor window above front door. Most other 2/2 dbl hung windows remain with alum storms.
	129.-3-10	406	E	Main	St	Funeral Home	EM-01	Yes	Garage	Wood Shingles	Concrete	East and west 1 story wings	1876	yes	Dr. Johnson House - Later became Tuthill Funeral Home: Dr. Joseph L. Johnson, a NYU medical school gaduate apparently died by 1900, leaving a widow Lulu Gaddis Johnson. In 1910 she was living here with her father, David E. Gaddis, a school teacher. They had two servants.	2 1/2 story impeccably restored/maintained cross gable Italianate. Full front width flat roof on ornate detailed square wood posts with brackets and railings over wraparound brick foundation porch. Ornate matched bracket pairs at eaves all around. Detailed arched brow cross head at double 3rd story windows.

Image	SCTM	No	pre	st	suf	Use	ID_NO	Original Condition (Y/N)	Detached Structures	Materials	Foundation	Additions	Circa	Contributory (Y/N)	Historic Significance	Architectural Notes:
	129.-3-11	414	E	Main	St	Vacant Land Located in Commercial Areas	EM-02							no		Parking Lot across from Riverhead Aquarium behind Tuthill Funeral Home
	129.-3-12	420	E	Main	St	Converted Residence	EM-03	Yes	Shed	Cedar Shingles	Concrete	No	1908*	yes	Owned by B. Frank Howell on 1916 map. Born in 1838, he moved to Riverhead in 1869 and opened a coal and wood business similar to the one his father ran in NYC. He also sold oats, corn and bran and was the cashier of a bank. Probably from an old North Fork family.	2 1/2 story dilapidated Shingle style cross gable with full front shed roof over glazed porch. East end of porch features round pavilion with later added insulated casement windows. Ornamental oval window in attic gable, diamond pattern divided lites in one attic shed dormer.
	129.-3-13	428	E	Main	St	Converted Residence	EM-04	Yes	Shed	Painted Shingles	Brick	No	1890*	yes	Owned by H.H. Preston on 1916 map. Herny H. Preston, born c. 1845, wounded in Civil War, moved from Shelter Island to Riverhead in 1902 when elected County Clerk. He was also in the insurance business.	2 story dilapidated eclectic Greek Revival square hipped with center gables front and both sides. The front pedimented gable extending over a full front and partial east side wraparound raised wood porch. Later enclosed 2nd floor sun porch with flared modesty panels under pediment. Many pairs of 2/1 double hung windows remain. Original Tuscan columns since replaced.
	128.-6-36	12		1st	St	Converted Residence	FI-01	Yes	Shed	Wood Shingles	Not Visible	No	pre-1858	yes	Corwin-Katz House: Probably built by Henry W. Corwin, master builder, (Methodist Church and other noteable local structures) as his own home. Later home of long time residents Morris and Rose Katz, prominent clothier and members of local Jewish community. Now A.B. Tohill Attorneys	2 1/2 story side gable Gothic Revival with prominent centered front gable featuring a pointed top window with matching pointed shutters. Full wraparound front and both sides raised wood porch. Heavy cornice and Greek influenced bead and reel frieze with Tuscan columns and railing at porch. Small flat roof bays on both sides. well restored/maintained.
	128.-6-37.1	18		1st	St	Converted Residence	FI-02	Yes	No	Wood Shingles	stone/block	No	1885* Believed but unconfirmed to have been built closer to 1850	yes	Fenimore Meyer House: Probably built by James Davis. Later home of Mr. and Mrs. Jacob Meyer. In 1896 Meyer bought out the 42 year old business of leading merchant Jonas Fishel to found Meyer's Dept. Store. In 1902 Jacob Meyer bought the house, enlarged it, and moved in.	2 story front gable Italianate with front center 3 story mansard roof tower featuring ornate wrought iron crest work. Front symmetrical raised wood porch with low hip roof and Tuscan columns with low wood railing, ornate frieze and archetypical brackets on house and porch. Ornate trimmed deep hooded arch top windows on tower. The gable roof was a 20th century addition over the original more typical Italianate flat roof.
	128.-3-38.1	193		Griffing	Ave	Office Building	GR-01		No	Wood Shingles	Brick	Added commercial multilane Porte Cochere	1868*	yes	The Jeremiah Edwards House: Edwards a Democratic politician, officer of the Masonic Lodge, Director of the Riverhead Savings Bank and a Druggist. Designed by George H. Skidmore. Restored by Riverhead Savings Bank after years of neglect. Now occupied by Real Estate office	2 1/2 story cross gable Italianate with heavy crown and ornate bracket pairs all around. Front centered stacked triple windows with cathedral arch hood over ornate balcon fenetres. Note the still remaining multicolored slate roof. Two bay carport/drive up window added by the Bank in mid 20th century.
		206		Griffing	Ave	Office Building	GR-01a	Yes		Brick			Pre-1929	no		2 story flat roof office building non-contributory
	128.-5-5	214		Griffing	Ave	Office Building	GR-02	Yes	No	Asbestos shingles	brick	rear later addition	1850s	yes	The Slade-Hallett House: Built for newspaper pub. James B. Slade, also owned the "boneyard" where bones were converted to fertilizer. Later by Samuel Terry Hudson of Riverhead Agricultural Works. Later by Archibald Hallet, son of Charles Hallet (resident of 218 Griffing).	2 story 3 bay flat roof Italianate. Original lantern cupola since removed. Off center low slope hip roof portico with delicate column pairs. Prominent original cornice with detailed bracket pairs. Original tall 2/2 double hung windows with apparent original heavy bracketed crossheads. Single story bow oriel on south side rear

Image	SCTM	No	pre	st	suf	Use	ID_NO	Original Condition (Y/N)	Detached Structures	Materials	Foundation	Additions	Circa	Contributory (Y/N)	Historic Significance	Architectural Notes:
	128.-5-4	218		Griffing	Ave	Office Building	GR-03	Yes	Garage	Vinyl clapboard siding	not visible	rear later addition	1850s or early 1860s	yes	The Charles Hallett House: Hallett, the nephew of P.T. Barnum, ran a mill that was the largest enterprise in town. He produced flour, paperboard, and wood moldings that reputedly were used in his self designed home, the first in town with electric lights. His Electric Light Co. also served Riverhead	2 story single bay front gable Italianate with 1 story wraparound front and south side flat roof over low masonry replacement porch. Flat winged gable with prominent cornice and intricate original paired brackets. Turned spindle porch columns and associated carved brackets are vernacular replacements. tall 2/2 double hung windows appear original but with alum. storms.
	128.-5-3	224		Griffing	Ave	Office Building	GR-04	Yes	No shed or garage. Original granite wall along front of lawn	Vinyl clapboard siding	stone	Possible rear	1870*	yes	The Moore Barnes House: owned by A.G. Moore on 1873 map. Albert G. Moore, born in NJ c. 1820, was a toolmaker in the 1860 census, a plane maker in 1865 and a carpenter in 1880. Owned by W. Barnes in 1916. Col Walter F. Barnes was retired after 37 years with the NY National Guard.	2 story Italianate with front south wing and two flat winged gables. Ornate cornice work with paired brackets and dentil into the gables. Elaborate architypical square lantern cupola with triple graduated arch windows on each of the four sides. Flat roof raised front porch with Tuscan columns and spindle rilings above lattice panels. Large cross heads on windows with pediments over the gable centered units.
	127.-1-48	340		Maple	Ave	One Family Year-Round Residence	MA-01		2 bay gabled garage	vinyl siding	brick		pre-1916	yes	Owned by Mrs. P. Novasiki on 1916 map	2 1/2 story 2 bay Colonial Revival front gable with full width front shed roofed and later enclosed porch. Small hipped roof 1st floor side bay. Some remaining 6/1 double hung windows with storms on main house.
	127.-1-47	336		Maple	Ave	One Family Year-Round Residence	MA-02		2 bay garage	cementitious shingles		Rear ?	1922*	yes		2 story 2 bay Colonial Revival front gable with full width front shed roofed and later enclosed porch. Small hipped roof 1st floor side bay. Rear 1st floor addition. Original 2/2 double hung windows remain in main house.
	127.-1-46	334		Maple	Ave	One Family Year-Round Residence	MA-03		double width gabled garage	cementitious shingles	rock face concrete block		1927*	yes	House on this property owned by Mrs. Downs on 1916 map. Austin Downs, probably from an old Riverhead family, was a vetinearay doctor living on Maple Ave. in 1915.	2 1/2 story 3 bay hipped roof Colonial Revival with full width front hipped roof glass porch and center entry. Third floor front centered pedimented gable dormer.6/1 double hung windows mostly remain with storms.
	129.-2-23	226		Maple	Ave	One Family Year-Round Residence	MA-04	Yes	Shed	Wood clapboard	Concrete	No	pre-1916	yes	Owned by J. Hagan on 1916 map. Either James, John or Charles J. Hagan.	2 story 2 bay front gable Colonial Revival with full width later enclosed front side wrap porch. Double hung window configurations with replacement 1/1 sashes. North side prominent 2 story gable wing with centered 2 story bow windows.
	129.-2-24	218		Maple	Ave	Two Family Year-Round Residence	MA-05	Yes	Small shed	Cedar Shingles	Concrete	No	pre-1916	yes	2 story house (2nd structure on north end of larger lot) shown on property owned by Mrs. C. Amman on 1916 map. Her son George A. Amman, a photogrpaher, was living here in 1915. He was probably the son of Christian Amman, born in Germany, and variously a butcher or carpenter.	2 1/2 story front gable 2 bay Colonial Revival with full depth subordinate south side gable featuring diamond divided lites in attic window. Low hip roofed front glass porch with off center entry and brick stoop. Prominent frieze work and front gable pediment.
	129.-2-25	212		Maple	Ave	Multiple Residences	MA-06	Yes	Accessory Structure	Cedar Shingles	Stone	No	after 1916	yes	This house likely was built soon after the 1916 map, on property that had been owned by Mrs. G Amman and was later subdivided.	2 1/2 story Colonial Revival front gable with symmetrical subordinate side gables north and south. Full width front hip roofed center entry glass porch. South side 1st floor shed roofed wing. Strong frieze and front gable pediment, and Italianate influenced twin arch top attic windows.

Image	SCTM	No	pre	st	suf	Use	ID_NO	Original Condition (Y/N)	Detached Structures	Materials	Foundation	Additions	Circa	Contributory (Y/N)	Historic Significance	Architectural Notes:
	129.-2-26	204		Maple	Ave	Three Family Year-Round Residence	MA-07	Yes	Garage	Vinyl Siding	Not Visible	No	ca-1910	yes	Main house structure on property shown owned by Mrs. G. Amman on 1916 map. See MA-05 above (*note: this lot listed as MA-06 on SHPO building structure inventory form dated 5/18/77)*	2 story front gable Colonial Revival with front and south side wraparound low roof raised porch. Front and side stair to porch. Large shed roof 2 story wings both sides. Extensive vernacular modifications to cladding and trim. South side flat roof 1 story bow oriel.
	129.-2-27	156		Maple	Ave	One Family Year-Round Residence	MA-08	partially	No	Vinyl Siding	Brick	2 story at rear	1860*	yes	Possibly owned by D.Porter shown on 1873 map. Owned by A. Downs on 1916 map. See Austin Downs in MA-03 above	2 1/2 story cross gable Queen Anne. South side gable wing features 1 story bay oriel. Entry nested in corner with low slope roof over. Flared hood over 2nd floor front window pair. Pointed top window centered in front and rear attic gables with original ornamental T spindles. Barge board rakes and ogee on rafter tails
	129.-2-28	152		Maple	Ave	Multi-family Year-Round Residence	MA-09	No	No	Vinyl Siding	Concrete	Rear	1890*	yes	Owned by Raynor on 1916 map. Lorimer Raynor was a surveyor who was in Riverhead in 1900 but had moved to Union Avenue by 1920. He laid out Ostrander Avenue and the Second Street extension in 1905.	2 1/2 story 2 bay Colonial Revival side gable with full width low slope hipped roof raised front porch later enclosed. Front gable attic dormer original probable windows closed over with vernacular round vent. Yankee gutter system remains. Likely later added rear 2 story additions
	129.-2-29	150		Maple	Ave	One Family Year-Round Residence	MA-10	No	Garage	?		Side / Rear	1890*	no	Owned by Robert Rhodes on 1916 map. The 1920 census lists him as having his "own income."	2 story cross gable with enclosed front wraparound porch. South side 2 story gable features full height low slope roof bow oriel. Multiple apparent rear additions and vernacular modifications. Likely former Italianate influence.
	129.-2-30	140		Maple	Ave	Special Schools and Institutions adult home.	MA-11	Yes	Garage	Cedar Shingles	Not Visible	No	1880*	yes	Owned by Carrie B. Humphrey on 1916 map. She was a stenographer. In 1910 she and her husband, Raymond, a lawyer, were living with her parents, J. Phineas Lane, on East Street. By 1920, she was a widow in NYC.	2 1/2 story front gable 3 bay Colonial Revival with full front and south side wraparound shed roofed raised porch. Round top attic window. Queen Anne influence vernacular renovation with heavy cornice at roof, scrolled brackets and turned spindle posts at the front porch.
	129.-2-31	130		Maple	Ave	One Family Year-Round Residence	MA-12	Yes	Garage	Vinyl Siding	Concrete	No	possibly 1880*	yes	Property owned by W.J. Bussanian on 1916 map	2 story Colonial Revival side gable with full width shed dormers front and rear. Front 1 story wing with shed roof and front facing gable over off center porch entry
	129.-2-15	147		Maple	Ave	Multiple Residences	MA-13	Yes	Shed	Wood Shingles / Clapboard	Brick	? Rear	pre-1916	yes	Owned by H.F. Buxton on 1916 map. Horatio F. Buxton, born in Rhode Island, owned a general store	2 1/2 story 3 bay front gable with stepped lower rear gable. Full width front and south side wraparound hip roof over raised porch. Plain square columns and modesty panels with off center front entry steps. Some remaining 2/1 double hung windows
	129.-2-16	153		Maple	Ave	Two Family Year-Round Residence	MA-14	Yes	2 Car garage	Wood Shingles	Concrete	Possible rear	1870*	yes	Owned by S.W. Reeves on 1916 map. Sidney W. Reeve was a harnass maker from an old Riverhead family.	2 story 2 bay front gable Colonial Revival with possible Italianate influenced south side low slope hip roofed 1 story bow oriel. Rear gable steps higher. Full width front low hip roof over raised front porch with off center entry and steps. Later replacement Queen Anne style turned spindle posts, scrolled brackets and wood spindle railing. many 2/1 double hung windows remain with storms.

Image	SCTM	No	pre	st	suf	Use	ID_NO	Original Condition (Y/N)	Detached Structures	Materials	Foundation	Additions	Circa	Contributory (Y/N)	Historic Significance	Architectural Notes:
	129.-2-17	157		Maple	Ave	Two Family Year-Round Residence	MA-15	No	No	Vinyl Siding	Brick	Side and rear	1870*	no	Possibly owned by D. Porter on 1873 map. Owned by J. Lutz on 1916 map. Dr. James Lutz was a dentist who served in World War I.	2 story 3 bay front gable Colonial Revival with small off center gable portico over raised wood porch. Tuscan columns and wood railings. Multiple rear and side additions. Some apparent original 2/2 double hung windows remain with storms
	129.-2-19	203		Maple	Ave	One Family Year-Round Residence	MA-16	No	Garage	Vinyl Siding	Not Visible	Rear	pre-1916	yes	Owned by W.J. Bussanian on 1916 map	2 1/2 story originally 3 bay front gable Colonial Revival with 1 story stepped rear gable. Full width front later enclosed raised porch. South side shed roofed 1 story bay . Some 2/2 double hung windows remain with storms.
	129.-2-20	207		Maple	Ave	One Family Year-Round Residence	MA-17	No	Shed	Wood / Asbestos	Not Visible	No	1880*	yes	Owned by William Burnite on 1916 map. Probably a rental unit for him.	2 story 2 bay front gable Colonial Revival. Recent vernacular partial cladding, window and front door replacement.
	129.-2-21	213		Maple	Ave	Two Family Year-Round Residence	MA-18	Partially	Garage	Wood Shingles		Rear	1890*	yes	Owned by W. Biggs on 1916 map. William Biggs and his daughter Viola were cigar makers in 1910.	2 story front gable 1 bay Colonial Revival with full width front and north side wraparound glass porch. Many apparent 6/1 original double hung windows remain. Later side and rear additions and renovations done in similar vernacular.
	129.-2-22.2	219		Maple	Ave	Residential Vacant Land	MA-19							no		Empty Lot
	129.-2-22.1	225		Maple	Ave	Two Family Year-Round Residence	MA-20	yes	No	Asbestos shingle siding	Concrete	No	1920*	yes		2 1/2 story side gable Colonial Revival. Square with centered 1 story front pedimented gable over square column double entry porch, steps both sides. 6/1 double hung windows mostly remain with storms. Prominent simple frieze at cornice with broken pediment returns on side gables.
	128.-4-26	305		Maple	Ave	One Family Year-Round Residence	MA-21	partially	One car garage	vinyl siding	rock face concrete block	rear	1910*	yes		2 story 3 bay hip roofed Colonial Revival with front hip roof 1 story glass porch. Attic front center hip dormer has been sided over.
	128.-4-25	311		Maple	Ave	One Family Year-Round Residence	MA-22	No	Garage	vinyl siding	brick		1885*	yes	Owned by Mrs. A. Robinson on 1916 map. Albertina Robinson was born in Switzerland of French parents.	2 story cross gable T plan Colonial Revival . Broad side of the house to the road with center entry. Replacement windows throughout.Little remains of the original character other than general massing.

Image	SCTM	No	pre	st	suf	Use	ID_NO	Original Condition (Y/N)	Detached Structures	Materials	Foundation	Additions	Circa	Contributory (Y/N)	Historic Significance	Architectural Notes:
	128.-4-24	317		Maple	Ave	One Family Year-Round Residence	MA-23	Yes		vinyl siding	rock face concrete block	possible rear shed roof	1930*	yes		2 story 3 bay hip roofed Colonial Revival with front hip roof 1 story raised porch. Attic front center hip dormer with twin square windows. Original window configuration/locations appear to remain with replacement insulated 1/1 double hung units.
	126.-4-54	323		Maple	Ave	One Family Year-Round Residence	MA-24	Yes		vinyl siding	rock face concrete block or possibly stone	possible rear	1929*	yes		2 story 3 bay symmetrical front gable with applied front gambrel rakes. Front glass 1 story porch with low hip roof and center brick stoop entry. Apparent replacement 6/1 double huing windows in original configuration.
	126-4-53	329-331		Maple	Ave	Multiple Residences	MA-25	Yes	2 garages and 1 cottage	cedar shingle	not visible	rear	1908*	yes	Owned by S. Goldman on 1916 map. Shephard Goldman was a Russian Jew who immigrated in 1914 according to the 1920 census, but his children were born in this country starting in 1906. He was a butcher who owned his own slaughterhouse. One of the founders of Riverhead's Jewish Synagogue.	2 story 1 bay cross gable Colonial Revival with prominent gable to the road. South side 2 story gable with 1 story roofed south side entry porch. North side large 2 story wing or early addition.
	127-1-49.2	346		Maple	Ave	One Family Year-Round Residence	MA-26			cedar shingle	concrete		1900*	yes	Owned by M. D. Benjamin on 1916 map. Probably a rental property.	2 story 1 bay front gable Colonial Revival. Full width front to south side wraparound later fully enclosed porch. Rear 1 story low slope gable possible early addition with open deck. All windows have been replaced with insulated double hung units.
	127.-1-45	326		Maple	Ave	One Family Year-Round Residence	MA-27	Yes		Vinyl siding	CMU		possibly mid 1800s, and moved to site1920s	yes	Built on property owned by M.D. Benjamin on 1916 map	1 1/2 story 3 bay cross gable with single front shed dormer and full width low slope hipped roof over raised front wood porch. Mid story eave height suggests ballon framing, and lack of eave overhang are indicative of earlier mid 19th century construction. May have been moved from downtown to make way for growth there. Much later added or replacement CMU chimney
	127.-1-44	320		Maple	Ave	One Family Year-Round Residence	MA-28	No	Garage and shed	Vinyl and cedar shingle siding	CMU		1920s but may be significantly older structure later moved to this site	yes	Built on property owned by M.D. Benjamin on 1916 map	1 1/2 story 3 bay cross gable with full width low slope hipped roof over later enclosed vinyl clad front wood porch. Roof probably the only remaining component of porch. Main roof open rafter tails remain.
	129.-2-14	143		Maple	Ave	Year-Round Multiple Residence	MA-29	Yes	2 Car Garage	Wood Clapboard	not visible	rear	ca 1920	yes	Built on property owned by C. Bunce in 1916	2 story hip roofed cross ridge Colonial Revival with full 2 story south wing and small centered single story hip roof two tuscan column portico over a low brick porch. Original wood clapboard, flat window trim and open rafter tails remain. 6/1 doouble hung likely original windows remain with later alum storms.
	128.-4-6	9		Northville	Tpk	Year-Round Multiple Residence	NT-01	No	2 Car 1 1/2 story Garage with lfot door	vinyl siding	brick	2 story rear addition	pre 1900	yes	Owned by R. Hand on 1916 map. Lafyette R. Hand was a railroad news agent in 1900, a title searcher in 1910 and a clerk at WW I Camp Upton in 1920	2 1/2 story 3 bay front gable with original yankee gutter and top frieze configuration. Full width front low slope hip roof porch later fully enclosed. One 6/1 double hung and one leaded glass attic window remain. All other windows are likely modern replacements.

Image	SCTM	No	pre	st	suf	Use	ID_NO	Original Condition (Y/N)	Detached Structures	Materials	Foundation	Additions	Circa	Contributory (Y/N)	Historic Significance	Architectural Notes:
	128.-4-7	13		Northville	Tpk	Year-Round Multiple Residence	NT-02	Yes	2 Car Garage	vinyl siding	brick		pre 1910	yes	Owned by E. Young on 1916 map. Lewis E. Young owned a butcher shop on Griffing Avenue	2 1/2 story 2 bay front gable with full width single story shed roof over raised wood front porch. West side shed roof one story
	128.-4-8	19		Northville	Tpk	Year-Round Single family Residence	NT-03	Yes	one bay Garage with shed wing	asbestos shingles	CMU		pre 1900	yes	Owned by J. M. Corwin on 1916 map. J. Madison Corwin was a carpenter. (May have been living here before 1880).	1 1/2 story single bay front gable with full width shed roof over raised wood front porch
	128.-4-9	23		Northville	Tpk	Year-Round Single family Residence	NT-04	Yes	one car Garage with loft "barn" door and later side shed addition	cedar shingle siding	brick	1 story rear gable	pre 1900	yes	Shown as owned by F. F. Skidmore on 1916 map. Frank L. Corwin lived here, he was a house painter and decorator. In 1920, the house was occupied by his widow Theresa Skidmore and her stenographer daughter.	2 story 2 bay front gable Queen Anne influence with probable original cedar perfection siding. Ornamental scallop shingles in the main gable pediment. Full width front 1 story shed roof over raised wood porch with spindle columns and some trim remaining. 1 story shed roof bay on east side. wood railing failing and mostly gone. Original 2/1 double hung and leaded glass attic windows remain w/ alum storms.
	128.-4-10	95		Northville	Tpk	Year-Round Multiple Residence vacant	NT-05	No	Large back yard garage or cottage later construction	cedar shingle	not visible	front second story	pre 1910	yes	Owned by Thomas Fury on 1916 map. Thomas Fury was a warden in the county jail.	2 story 2 bay front gable with multiple additions and front wraparound hip roofed raised wood porch. Original massing mostly obscured by additions. House vacant and bordrline derelict with boarded up windows.
	128.-4-11	101		Northville	Tpk	One Family Year-Round Residence	NT-06	No	one car Garage	vinyl sided			between 1910 and 1916	yes	Owned by John Stonebank (a local plumber) on 1916 map.	2 1/2 story 2 bay front gable with full width low slope 1 story hip roof over raised front porch. Vernacular square brick columns and ornamental brick half screenwalls and off center brick steps to raised masonry porch added laterr. Little remaining of original structure character beyond basic massing.
	128.-4-12	107		Northville	Tpk	One Family Year-Round Residence	NT-07	Yes	two car Garage	vinyl sided	apparent brick		ca 1920s	yes	Built on property owned by J. Flannagan on 1916 map	2 story 2 bay front gable with full width 1 story shed roof over raised front wood porch.Modesty half walls, vernacular trim and shutters, and vinyl siding added later. Attic window closed over with vent.
	128.-4-13	111		Northville	Tpk	One Family Year-Round Residence	NT-08	Yes	Large two car Garage with large metal roofed shed wing addition	cedar shingle siding	not visible		ca 1920s	yes	Built on property owned by J. Flannagan on 1916 map. John Flannagan was born in Ireland, retired by 1920. Originally lived on Third Street. May have built the house next door (NT-07) as a rental.	2 1/2 story 2 bay by 2 bay four square hip roof Colonial Revival with 1 story full width later enclosed raised wood porch with hip roof. Center front attic twin window hip dormer. 2/1 double hung attic windows remain. Original cedar shingles have been maintained with façade frieze and crown. Flat window trims remain. 1/1 double hung windows with later alum. storms. Newer casements in enclosed porch.
	129.-3-28	146		Ostrander	Ave	One Family Year-Round Residence	OS-01	Yes	Garage	Asbestos Shingles	Concrete	No	1912*	yes	Owned by F. Porter Howell on 1916 map. See below re. Howell. This, or possibly his other house below, was likely rented to an Scotish-born music teacher in 1920.	2 1/2 story side gable Shingle Style with full front and rear shed dormers. Front rake flares over front raised porch with plain Tuscan columns. Center entry porch wraps to south side. Front dormer wall articulates to creat inset 2nd story balcony with front privacy railing. Front porch later partially enclosed. 16/1 double hung windows mostly remain

Image	SCTM	No	pre	st	suf	Use	ID_NO	Original Condition (Y/N)	Detached Structures	Materials	Foundation	Additions	Circa	Contributory (Y/N)	Historic Significance	Architectural Notes:
	129.-3-29	138		Ostrander	Ave	One Family Year-Round Residence	OS-02	Yes	Garage		Not Visible		between 1905-1916	yes	Owned by F. Porter Howell on 1916 map. Howell was a Calverton duck farmer, but like many in that business, choose not to live on the farm. He was also a bank director.	2 1/2 story 3 bay Colonial Revival side gable with off center prominent front gable. Full width front and south side wraparound low slope roof over raised porch. Queeen Anne influence turned spindle posts with small scroll work brackets. Off center entry and steps to porch. Rear off center gable with single story hip roof mudroom and bay oriel. Queen Anne style ornamental window lites at main stair
	129.-3-30	130-132		Ostrander	Ave	Professional Building	OS-03	Yes	Accessory Structure	Wood Shingles	Stone	No	1910*	yes	Owned by Mrs. John W. Reeves on 1916 map. She was a widow of a farmer. By 1920, this house belonged to Otis G. Pike, the secretary and treasurer of a bank. This was the birthplace of Otis G. Pike, Jr., who represented the East End in Congress from 1961 to 1979. Is still in the Pike family in 2014.	2 1/2 story 3 bay square hip roofed Colonial Revival with protruding center bay on 2nd floor. Twin window hip dormers on front and sides. Full front and south side wraparound raised porch with wood railings and Tuscan columns.
	129.-3-14	117		Ostrander	Ave	Residence with Incidental Commercial Use	OS-04		Accessory Structure	Asbestos Shingles	Concrete	No	1958*	no		2 story side gable Colonial Revival with gambrel roof. 2 front symmetrically balanced single window 2nd floor gabled dormers, and one 3/4 width rear shed dormer.
	129.-3-15.2	129		Ostrander	Ave	Office Building	OS-05	Yes	No	Painted Shingles	Concrete	No	1958*	no	*Listed as OS-06 on SHPO Building Structure Inventory Form dated 5/18/77.* Originally used as a medical office.	Very narrow 1 story cross gable Eclectic Folk cottage. Dominant front to rear gable structure with clipped side gable front entry section. Clipped gable off center front entry portico with a Adam influence fan lite over paired 8/8 double hung windows, possible later addition.
	129.-3-15.1	131		Ostrander	Ave	One Family Year-Round Residence	OS-06	Yes	Garage	Wood Clapboard		No	1910*	yes	Owned by Horace H. Williamson on 1916 map. Williamson was the owner and editor of the Riverhead News, the area's Democratic paper and predecessor to the current News-Review.	2 1/2 story Hip roofed Queen Anne with front and side prominent gables. Full front and south side wraparound raised roof over wood porch. Off center stairs under gabled potico to front entry. Porch features tuscan columns and a round south corner pavillion. Diamond shaped divided lites largeley remain.
	129.-3-16	139		Ostrander	Ave	Welfare	OS-07		Garage	Painted Shingles	Concrete	Side	1928*	yes		2 story side gable gambrel trimmed Colonial Revival. Off center entry portico gable with vaulted arch over fan lite entry and brick stoop. Fan lite windows centered in each end of attic gambrel.
	129.-3-17	143		Ostrander	Ave	One Family Year-Round Residence	OS-08		Garage	Painted Shingles	Concrete	Rear	1856*	yes	Owned by E.M. Robinson on 1916 map. Ernest Robinson was the secretary and treasurer of a potato exchange in1910. By 1920, he was a "clerical" in the county treasurer's office. This house was likely moved from another location after Ostrander Ave. was laid out in 1905.	2 story 3 bay low slope hipped roof Italianate with yankee gutters and roof over front porch. Original wood porch is gone. Original gothic influence columns are gone. 1 1/2 story north side wing with 1 story front bow oriel. Original double hung windows have been mostly replaced with 1/1 insulated units.
	129.-3-18	149		Ostrander	Ave	Two Family Year-Round Residence	OS-09		Garage	Asbestos Shingles	Brick	Rear	1869*	yes	Owned by Kirk Bagshaw on 1916 map. In 1920, he was a "clerical" in the county treasurer's office. This house was likely moved from another location after Ostrander Ave. was laid out inr 1905.	2 story 3 bay low slope hipped roof Italianate with yankee gutters and roof over front porch. 2 story north side wing. Full width wood porch continues across in front of north wing. Original double hung windows have been mostly replaced with 1/1 insulated units. Rear low slope shed roof 1 story full width wing possible later addition.

Image	SCTM	No	pre	st	suf	Use	ID_NO	Original Condition (Y/N)	Detached Structures	Materials	Foundation	Additions	Circa	Contributory (Y/N)	Historic Significance	Architectural Notes:
	128.-5-26	322		Roanoke	Ave	Converted Residence	RO-01	Yes	No	Vinyl Siding	Concrete	Possible rear	pre-1873	yes	Owned by G.C. Corwin on 1873 map, and George C. (Chauncey) Corwin on 1916 map. Corwin, from an old Riverhead family, was engaged in one of Riverhead's three ice businesses.	2 story L shaped cross low slope gable with Italianate influence flat winged gables. Full front low slope shed roof over slab porch which continues across in front of side gable 2 story wing. Wing features 2 story low slope bow oriel. Windows, cladding and columns all recently replaced in modern vernacular, including faux 4/4 double hung insulated window units.
	128.-5-27	318		Roanoke	Ave	Converted Residence	RO-02	Yes	No	Vinyl Siding	Concrete	No	pre-1873	yes	Owned by Benjamin Hallock on 1873 map. Hallock, born about 1825, was a sea captain in NYC in 1860. Perhaps that was how he met his English-born wife, Emma. He is listed as keeping a market in 1880. owned by Mrs. L. Sweezy on 1916 map. Hallock's daughter Laura Sweezy, born c. 1851 was widowed young, and was still living here in 1920 at age 69.	2 story L shaped cross gable low slope roof with Italianate influence flat winged gables. 1 story vaulted arch gable portico over brick entry stoop not original. Deep frieze has been replicated in vernacular cladding. Windows replaced with double hung faux 4/4 insulated units. Original paired arch italianate attic windows have been clad over.
	128.-5-28	312		Roanoke	Ave	One Story Small Structure - Multi occupant	RO-03	Yes	No	Wood Shingle	Concrete	No	1948*	yes		2 story 4 bay side gable Colonial Revival. Front 1 story off center hip roofed wing with gable feature over entry. 3 window 1 story metal mansard front roof bay opposite to entry wing. Many original 6/1 double hung wiondows remain with storms.
	128.-5-29	306		Roanoke	Ave	Apartments	RO-04	Yes	No	Painted Shingles	Brick and stone	Rear probable	1948*	yes	Stone foundation probably partially from Swedenborgian chruch built on this site in 1855. Current structure built after church was divided in half moved to become two houses about a half mile to the north.	2 1/2 story front gable Colonial Revival with full width front and both sides 1 story hipped roof probable former porch later enclosed. Attic with full shed dormers on both sides. Telescoped rear gable wing and multiple varied rear 1 story addtions.
	128.-6-31	220		Roanoke	Ave	Office Building	RO-05	Yes	No	Brick	Concrete	No	1928	yes	Odd Fellows Lodge Designed by August H. Galow. Note the trademark diagonal brick panels under the 3rd story windows, similar to those on the Commercial Building (Peconic and E. Main) also by Galow. Town Hall also occupied the 1st floor and basement until 1976.	3 story Federal Style 3 bay by 5 bay brick building with Colonial Revival details. Common running brick and repeating 6th course header. Brick vousoirs with limestone keystones. Brick panels beneath 3rd floor round top windows with gothic influenced lite divisions. Prominent frieze and cornice with wood dentil. Stone band at top of 1st floor.
	128.-6-32	214		Roanoke	Ave	Converted Residence	RO-06	Yes	Shed	Vinyl Siding	Concrete	No	pre-1858	yes	Vail House: Originally constructed for Mrs. J Vail on the corner of 2nd Street. Moved prior to 1928 to construct the Odd Fellows Lodge. Served as the Riverhead Sanitorium, a birthing hospital in the 1930s run by Lucy Hallock and sister Edith.	2 story hip roofed Italianate with dominant front gable. Small arch top attic window centered over paired arch 2nd floor windows over double door front entry full front widtn 1 story roof over raised front wood porch with wood railings and Tuscan columns. Rear 2 story cross gables and clipped south corner front window. Tall 2/2 insulated placement double hung windows.
	128.-6-33	208		Roanoke	Ave	Office Building	RO-07	No	No	Brick	Concrete	No	1959*	no		1 story brick and concrete with commercial aluminum and mirrored glazing windows
	128.-6-34	206		Roanoke	Ave	Converted Residence	RO-08	Yes	No	Clapboard	Not Visible	No	1890*	yes	Cora Reeve Barnes House: Originally home of Howell Monroe Reeve and wife Lydia. Founder Suffolk County Trust Co.. Later of daughter Cora Belle Reeve who married Col. Walter Barnes.	2 story3 bay hip roofed italianate with arch windowed lantern cupola. Small gable attic window dormers centered in main roof facing south and west. 2 story subordinate wing on north side with west facing 1 story flat roof bow oriel. Front and south side wraparound low pitch roof 1 story porch added 1914, later (1970s) mostly enclosed. Porch still open with square column pairs at off center brick porch entry.

Image	SCTM	No	pre	st	suf	Use	ID_NO	Original Condition (Y/N)	Detached Structures	Materials	Foundation	Additions	Circa	Contributory (Y/N)	Historic Significance	Architectural Notes:
	128.-6-9	209-211		Roanoke	Ave	One Story Small Structure - Multi occupant	RO-09		No	Painted synthetic Shingles	Brick	Rear	1859*	yes	Owned by W. Walkman on 1873 map. William Walkman was a 35-year old English-born master confectioner in the 1860 census. Owned by Baiting Hollow Telephone Co. on 1916 map. Founded by a group of farmers in 1901. By 1903 this company had 150 subscribers throughout the town. Last independent phone company in Suffolk County,, sold to New York Telephone in 1917.	2 story side gable Colonial Revival with full width 1 story front hip roof over wood porch with entry steps on side. Rear gable 2 story wing with single story rear additions. Added handicapped access ramp at rear
	128.-6-8	215		Roanoke	Ave	One Story Small Structure - Multi occupant	RO-10		No	Painted Shingles	Brick / Concrete	Large Rear extension	pre-1858 probably 1840s	yes	Riverhead News Building or the Corwin-Davis House: Belonged to B.B.Corwin and J.C. Davis. The Greek Key elements on the corner pilasters and front door surrounds are typical of the style in that period. Simplified versions that could be hand tooled by craftsmen of the time. John C. Davis was a partner with Nathan Corwin in a general store and later the firm of Corwin, Davis & Co. also operated a lumber yard on the Peconic River.	2 story front gable greek revival with off center front entry surround and corner pilasters. Brick and concrete front stoop probably added later. Low north and south side eave "belly"windows just beneath the frieze. Windows all replacement insulated units with faux 6/6 divided lites. Front entry likely had side lites and a partially Main Entry glazed door.
	128.-6-7	223		Roanoke	Ave	Converted Residence	RO-11	Yes	Garage	Clapboard	CMU		1824*	yes	Wells Robinson House, residence of : Joshua L. Wells Jr. who was a partner with Silas S. Terry in a general store and lumber yard in the 1850s; Dr. Henry P. and Carrie Corwin Terry; he moved to Riverhead after retiring from a medical practice in Cutchogue in 1890 and became the chief organizer of Suffolk County Nadtional Bank, which still has its headquarters in Riverhead; and Leland Robinson, an agricultural produce dealer, among others.	2 1/2 story low hip roofed Italianate with 8 window lantern cupola. Front and rear facing attic gables with paired arch top windows. 1 story flat roof front porch with ornate scrollwork columns a large frieze and detailed bracket pairs. 2 story flat roof bow oriel. large frieze at high roof with large elaborate scrolled brackets all around. Apparent original 9/6 windows at front with storms. An excellent example of Italianate style so popular regionally in the mid 19th century
	128.-6-11	203		Roanoke	Ave	Converted Residence	RO-12	Yes	No	Vinyl shiplap siding	brick	Rear addition	1858-1873	yes	Owned by Mrs. J. Martin on 1873 map. The 1870 census shows John Martin, a laborer, and his wife Mary, with two adult borders, one of whom had two children. Ten years later, Mary was a widow. Owned by William M. Litchard on 1916 map. Litchard was a traveling grocery salesman.	2 1/2 story side gambrel Colonial Revival with twin front second story gable pediments, one over a square bay and one over a bow. Full width low slope shed roof over first story raised porch with pairs of Tuscan columns and a simple molding on frieze. Low spindle railings either side of steps to center entry. Original
	128.-6-12.1	169		Roanoke	Ave	Converted Residence	RO-13	Yes	No	Vinyl clapboard and scalloped shingle siding	brick	Rear addition?	pre-1916	yes	Owned by Estate of J.H. Perkins on 1916 map	2 1/2 story cross gable Queen Anne caringly restored with modern materials. A few original stained glass Queen Anne windows remain. Narrow front wing features stained glass attic window in scalloped shingle sided stepped pediment. Subordinate west gable over 2 story oriel with stained glass windows in all three sides of the bow.
	128.-5-12	20		3rd	St	Two Family Year-Round Residence	TH-02	Yes	No	Clapboard	Stone	No	pre-1916	yes	Owned by Mrs. B.H. Lord on 1916 map. See TH-01 above	2 1/2 story 2 bay by 2 bay hip roof Colonial Revival with 1 story full width and west side wraparound raised wood porch with hip roof over Tuscan columns. Center front attic single window hip dormer. 6/1 double hung windows mostly remain with storms.

Image	SCTM	No	pre	st	suf	Use	ID_NO	Original Condition (Y/N)	Detached Structures	Materials	Foundation	Additions	Circa	Contributory (Y/N)	Historic Significance	Architectural Notes:
	128.-5-13	28		3rd	St	One Family Year-Round Residence	TH-03	No	Garage	Vinyl Siding	Not Visible	Rear	pre-1873	yes	Owned by John Bartlett on 1873 map, M. Bartley on 1916 map *(perhaps misspelling of the same sir names)* John Bartley, born in Ireland c. 1821, was a tailor. He was one of two trustees when St. John's R.C. parish was incorporated in 1864.	2 story front gable presumed Colonial Revival. 1 story west side shed roof wing. Essentially no original windows or trim remain. House clad in all modern materials.
	128.-5-14	34		3rd	St	One Family Year-Round Residence	TH-04		Garage	Vinyl Siding	Concrete	No	pre-1873	yes	Owned by G. Hudson on 1873 map, Mrs. Luther Skidmore on 1916 map. Luther Skidmore came to Riverhead in 1834 from Baiting Hollow and for many years operated a sash, door and blind manfuacturering operation using Peconic River water power.	2 story front gable 3 bay by 3 bay probable Italianate with 1 story full width front 1 story hip roof porch. Porch later enclosed. 1/1 insulated double hung replacement windows throughout. Typical Italianate flat gable wings with apparent yanke gutters remain.
	128.-5-15	38		3rd	St	One Family Year-Round Residence	TH-05		No	Vinyl Siding	Concrete	No	1989*	no		1 story low hip roof cottage
	128.-5-16	48		3rd	St	One Family Year-Round Residence	TH-06	Yes	Shed	Clapboard	Brick	No	pre-1873	yes	Owned by J. Flannigan on 1873 and J. Flanagan on 1916 map. John Flanagan was born in Ireland c. 1843. On the 1920 census, he was one of 7 Irish families on Third Street.	2 story cross gable possible Italianate with amin gable facing street. Low slope hip 1 story roof over front and east side wraparound wood porch with scrolled brackets and spindle posts. 6/6 , 4/4, and 1/1 mix of double hung windows. Many appear original. repairs ongoing at time of inspection.
	128.-5-17	58		3rd	St	Two Family Year-Round Residence	TH-07	Yes	Garage	Cedar Shingles	Concrete	No	pre-1873	yes	Owned by T. Welch on 1873 map and M. Walsh on 1916 map *(perhaps misspelling of the same sur names).* Thomas Walsh, a farm laborer, was born in Ireland c, 1839. Mary Walsh, his daughter, lived here in 1920 with a brother John.	1 1/2 story cross gable Queen Anne style cross gable with front and west side wraparound wood front porch. Architypical fretwork and turned spindle posts and railing distressed but remaining. Main 3 bay gable facing street.
	128.-5-18	57		3rd	St	Two Family Year-Round Residence	TH-08	Yes	Garage	Cedar Shingles	Rock face concrete block	Side	pre-1873	yes	Owned by Charles Davis on 1873 map. In 1870, Davis is listed as a 68 year old gardener and his son, in the same house, was a carpenter. Owned by Gerard Estate on 1916 map	2 story side gable gambrel trimmed Colonial Revival.Front glass porch with 1 story hip roof and center entry. Low pitch rear gable 1 story wing probable later addition. Unique 3/1 double hung windows remain with storms
	128.-5-19	49		3rd	St	One Family Year-Round Residence	TH-09	Yes	Garage	Painted Shingles	Concrete	No	1955*	no		1 1/2 story side gable modern with rear gable center wing. All contemporary insulated casement windows.
	128.-5-20	45		3rd	St	Residential Vacant Land	TH-10							no		Empty Lot

Image	SCTM	No	pre	st	suf	Use	ID_NO	Original Condition (Y/N)	Detached Structures	Materials	Foundation	Additions	Circa	Contributory (Y/N)	Historic Significance	Architectural Notes:
	128.-5-21	41		3rd	St	Two Family Year-Round Residence	TH-11		Garage	Asbestos Shingles	Concrete	No	after 1916	no		2 story side gable Colonial Revival with front 1 story center gable entry vestibule. Rear center gable wing. Most windows have been replaced with insulated casement units
	128.-5-22	37		3rd	St	One Family Year-Round Residence	TH-12	Yes	No	Cedar Shingles	Concrete	Rear	1867*	yes	Owned by R. Bartlett on 1873 map. Robert Bartlet was an Irish born boatman on the 1865 census. Owned by Madden on 1916 map.	1 1/2 story side gable Eclectic National Folk cottage. Craftsman influence low slope center shed dormer on front, and 4 gang small double window s in 2nd floor gable ends. Full front and east side wraparound hip roof 1 story porch roof over porch with Tuscan columns. Large rear 1 story off center gable wing.
	129.-3-1	216		Union	Ave	One Family Year-Round Residence	UN-01	No	Garage	Asbestos Shingles	Brick	Side	1880*	yes	Owned by Miss Ellen Terry on 1916 map. On the 1920 cenus she was the widow of George F. Terry, a farmer, and is thought to have moved to town after his death.	1 1/2 story 2 bay front gable Italianate. Single story shed roof additions or enclosed porches along both sides. 2/2 double hung windows remain with storms.
	129.-3-2	210		Union	Ave	Two Family Year-Round Residence	UN-02	Yes	No	Asbestos Shingles	Concrete	Rear	1910*	yes	Owned by Antone Schulhoff on 1916 map. Born in Germany c. 1855, immigrated in 1861, he was a shoemaker and shoe store owner who took over the Tuthill shore store in 1881. Property subdivided into two lots between 1916 and 1929.	2 1/2 story 3 bay front gable Colonial Revival with front and side wraparound porch later glazed in. Yankee gutters. Remnant pointed top double hung attic window remains. Rear single story gable wing.
	129.-3-3	204		Union	Ave	One Family Year-Round Residence	UN-03	Yes	Oversized gabled carriage house Garage with cupola	Painted Shingles	Concrete	No	1900*	yes	Owned by Antone Schulhoff on 1916 (See above. One of these houses was probably rented.)	2 1/2 story 3 bay front gable Italianate influence Colonial Revival with front and side wraparound porch later glazed in. Yankee gutters. Remnant pointed top double hung attic window remains. Rear single story gable wing.
	129.-3-4	156		Union	Ave	One Family Year-Round Residence	UN-04	Yes	Garage	Cedar Shingles	Concrete	No	1929*	yes		2 story side gable Italianate influence Colonial Revival with full front and rear shed dormers. Full front low slope roofed over raised porch with center brick stoop and sided modesty panels. Proch partially enclosed
	129.-3-5	150		Union	Ave	One Family Year-Round Residence	UN-05	No	No	Vinyl Siding	Concrete		1960*	no		2 story front gable modern with single story shed roof front wing and asymmetrical covered brick entry stoop.
	129.-3-6	144-146		Union	Ave	Two Family Year-Round Residence	UN-06	Yes	No	Painted Shingles	Concrete	Rear	1880*	yes	Owned by L.M. Raynor in 1916. Lorimer Raynor shows up here on the 1900 and later censuses. He was born in 1861. In 1900 he was a carpenter and teacher, in later years a surveyor	2 1/2 story 3 bay front gable Colonial Revival with off center front entry brick stoop. Italianate influuence flat rake wings on gable end. Common Adam style pilasters and flat entablature entry surround. Remnant 4/4 pointed top arch window in attic. 4/4 double hung windows in remainder of home.

Image	SCTM	No	pre	st	suf	Use	ID_NO	Original Condition (Y/N)	Detached Structures	Materials	Foundation	Additions	Circa	Contributory (Y/N)	Historic Significance	Architectural Notes:
	129.-3-7	138		Union	Ave	One Family Year-Round Residence	UN-07	Yes	2 bay front gable Garage	Painted Shingles	Not Visible		1918*	yes	Owned by T. Skidmore on 1916 map. On the 1910 census, Theodore Skidmore was 66 years old, and a sash and blind maker. He was a son of Luther Skidmore who founded the company, one of two in this business in town. He was the brother of George H. Skidmore, Riverhead's leading architect.	1 1/2 story side gable Craftsman bungalow with dominanat front gable dormer. Full width front roof over front raised porch. Pairs of square columns on pedestal bases. Column details suggestive of a Sears Honor Bilt home called The Woodland from ca 1921
	129.-3-8	132		Union	Ave	One Family Year-Round Residence	UN-08	No	Garage	Painted Shingles	Concrete	2 story rear	early 1900s	yes	Structure of similar configuration shown on property. Owned by C.W. Conklin on 1873 map, Charles W. Conklin shows up on the 1870 and 1880 census as a carpenter and the 1900 census as a hotel keeper, but it is not certain where he lived. Owned by H. B. Howell on 1916 map. May have been a rental property for Howell.	2 story cross gable Colonial Revival with dominant gable facing street. Low slope roof over full width wraparound raised front porch. Porch partially enclosed with modern jalousied glass. Most 2/2 double hung windows remain with storms. Secondary side 2 story gable with 2 story flat roof bow oriel. Turned spindle columns with modesty panels at front porch.
	129.-3-9	124-126		Union	Ave	Parking Lot	UN-09							no		Parking Lot
	129.-2-35	125		Union	Ave	One Family Year-Round Residence	UN-10	Yes	Garage	Vinyl Siding	Not Visible	Rear canopy	pre-1873	yes	Structure of similar configuration shown on property. Owned by C.W. Conklin on 1873 map. Owned by H. B. Howell on 1916 map. See UN-08 above	2 1/2 story cross gable Colonial Revival. Full width low slope roof over 1 story raised wood front porch. South end of porch features circular covered pavillion. Apparently later applied scroll cut Queen Anne influence brackets on sqaure wood columns. Pairs of 1/1 double hung windows at 2nd floor and attic
	129.-2-36	131		Union	Ave	Converted Residence	UN-11	Yes	No	Vinyl Siding	Brick	No	pre-1873	yes	Owned by E. C. Corwin on 1873 map, George T. Reeves on 1916 map. Reeves is here on the 1915 census. He was a clerk in the county clerk's office as early as 1880.	2 1/2 story 3 bay front gable Colonial Revival with secondary 1 story south facing side gable featuring a flat roof bow oriel. Full width low slope hip roof over raised front porch and wraps around to side wing entrance. Faux arch top applied to attic window. 6/6 double hung insulated replacement widows through most of the house. Transom windows above front units.
	129.-2-37	135		Union	Ave	One Family Year-Round Residence	UN-12	Yes	No	Asbestos Shingles	Not Visible		1870*	yes	Owned by A. Downs on 1873 map, W. J. Bussanian on 1916 map. Austin Downs was a 64-year old lawyer in 1870. His son, Austin, Jr., was a horse trainer in Brooklyn in 1880, but was back in Riverhead, living here, as a vet nary surgeon in 1910.	2 1/2 story 2 bay front gable with full width low slope 1 story roof over raised front porch. Simple square columns with off center brick steps to front door. 1/1 double hung windows remain with alum. storms. 2 story south flat roof wing. Point top attic window with dilapidated closed shutters remains.
	129.-2-38	141		Union	Ave	One Family Year-Round Residence	UN-13	Yes	2 bay flat roofed Garage	Painted Shingles	Not Visible	No	1934*	yes		1 1/2 story hip roof Folk National style cottage with narrow side to street. Triple ganged 6/1 double hung windows in hipped front dormer. Front corner glassed in entry porch with brick stoop. Minor side center gabled wing. Most 6/1 double hung windows remain, some with alum. storms.
	129.-2-39	145		Union	Ave	One Family Year-Round Residence	UN-14	No	Garage	Vinyl Siding	Concrete	Rear	1951*	no		2 story expanded irregular side gable contemporary with all insulated casement window units.

Image	SCTM	No	pre	st	suf	Use	ID_NO	Original Condition (Y/N)	Detached Structures	Materials	Foundation	Additions	Circa	Contributory (Y/N)	Historic Significance	Architectural Notes:
	129.-2-40.1	153		Union	Ave	One Family Year-Round Residence	UN-15	Yes	No	Vinyl Siding	Concrete	Rear / Side	1890*	yes	Owned by T. Britton on 1916 map. Thomas Britton, was a Civil War veteran born in Nova Scotia. He was a carpenter and became Fire Department chief in 1895.	2 story front and wing gable likely original Italianate with low slope 1 story roof over entry porch nested in corner of main structure and wing. 1 1/2 story side wing features 1 story low slope hipped bow oriel. Front gable shows original point top double hung attic window. 2/2 double hung windows mostly remain with later added alum. storms.
	129.-2-41	203		Union	Ave	One Family Year-Round Residence	UN-16	Yes	Garage	Clapboard	Concrete	Rear	1900*	yes	Howser property on 1873 map. William H. Housner was a partner with Joshua Fanning in a produce and farm supply house. Owned by Antone Schulhoff on 1916 map.	2 1/2 story 3 bay front gable Italianate with full width low slope hip roof over 1 story raised wood porch and railings. Off center entry with 2 leaf arched top glazed entry door. Point top 4/4 double hung attic widow remains as does ornate corbeled and panelized brick Queen Anne influence chimney. 4/4 double hung windows mostly remain throughout. Apparent original low rock face concrete block wall around front of yard.
	129.-2-42	213		Union	Ave	One Family Year-Round Residence	UN-17	Yes	Garage	Cedar Shingles	Brick	Rear	1890*	yes	Owned by C. Skidmore on 1916 map. Charles Skidmore, born c. 1855, was a son of Luther, and brother of Theodore and George. He was also involved in the family's sash and blind business.	2 story front and side wing asymmetrical gable Queen Anne with full width front roof over 1 story porch raised wood with railings. Off center entry door and steps. Cedar perfection siding with Shingle style influence flared belt line, and scalloped shingles in gable end. Several original Queen Anne decorative stained glass windows remain. 1/1 paired double hung windows throughout elsewhere.
	129.-2-43	219		Union	Ave	One Family Year-Round Residence	UN-18	Yes	Garage	Vinyl Siding	Concrete	Side	1898*	yes	Owned by Charles Elton on 1916 map. Charles Elton was the son of James Elton. Charles was a coal company salesman living on East Street in the 1920 census. This may have been a rental. (See EA-12 above)	1 1/2 story side gable Colonial Revival with a small front gable portico over the center entry brick stoop. Front and rear center shed dormers with paired 1/1 double hung windows. Single story low hip roof south side wing at rear corner.
	129.-2-44	223		Union	Ave	One Family Year-Round Residence	UN-19	No	Garage	Vinyl Siding		Side and rear	1890*	yes	Owned by Carrie H. Weeks on 1916 map. She was born in England. In the 1900 and 1910 census Weeks shows up as a dress maker, working at home with her daughter.	Non Contributory
	128.-6-3.1	33	W	Second	St	Professional Building	W2-01	No	No	Clapboard	Not Visible	Multiple	1858-1873	yes	The Lane House is the center element and only original component of the large conglomeration of residential looking structures merged together by the Law Firm of Twomey Latham Shea & Kelly in a restoration effort to maintain the character of the street and provide adequate office space	2 story cross gable former Italianate with full wraparound porch featuring Tuscan columns and wood spindle railings. The original structure has been renovated, added to and combined with adjacent structures. Some original features remain including pointed top attic windows, second floor paired arch top windows, corbeled brick chimney and heavy frieze.
	128.-6-4.1	23	W	Second	St	Office Building	W2-02	Yes	No	Clapboard	Not Visible	No	1920*	yes	This last addition to the Law Firm offices next door was intended to emulate the Italianate style of the pre-1876 Tuthill-Vail house that was moved from the site to the east in order to build the Post Office	2 story low slope hip roofed Italianate influenced with full width street side wraparound 1 story raised wood porch. Original structure appears to comprise only the front portion of a much larger building. Triple arched windows on all four sides of lantern cupola in typical Italianate style.
	128.-6-5.1	21	W	Second	St	Office Building	W2-03	Yes	No	Brick	Concrete	No	1935*	yes	This structure and the Pulaski Street School were among thousands built by the Works Progress Administration, a relief program started by FDR to combat the impact of the Great Depression. $11 billion was spent between 1935 and 1943 on 1.4 million projects providing 8.5 million jobs.	1 story Colonial Revival with Federal Style influences. A flat roof brick former Post Office building with quoining, voussoirs, prominent frieze and monumental stone steps up to the three pairs of divided lite french entry doors with stately arched fan lites over each pair. Large ornamental cast iron lanterns remain flanking each pair of doors.

Image	SCTM	No	pre	st	suf	Use	ID_NO	Original Condition (Y/N)	Detached Structures	Materials	Foundation	Additions	Circa	Contributory (Y/N)	Historic Significance	Architectural Notes:
	128.-6-6	15-Nov	W	Second	St	Professional Building	W2-04	No	No	Brick and concrete block	Concrete	No	1965*	no		Small 1 story Federal Style flat roof brick faced building with voussoirs and a prominent wood façade frieze and dentil molding.

* Listed as first date on Town of Riverhead Tax Assessor worksheet for year originally constructed.

Other dates listed in the Circa column have been gathered from SHPO Building-Structure inventory forms, maps listed below, or may be unsubstantiated anecdotal data from various local historical information sources.

Maps referenced are:

Map of Suffolk County, L.I. NY. From Actual Surveys by J. Chace Jr. Published by John Douglass 1858

Atlas of Long Island, NY. From Recent and Actual Surveys by Beers Comstock & Cline 1873

Atlas of a Part of Suffolk County, L.I., NY. South Side Ocean Shore Vol. II New York: E. Belcher Hyde, 1916

APPENDIX D

Toxics Targeting Information Source Guide

Information Source Guide

Toxics Targeting's Environmental Reports contain government and other information compiled on 18 categories of reported known or potential toxic sites. Each toxic site database is described below with information detailing a) the source of the information, b) the date when each database is covered to and c) when *Toxics Targeting* obtained the information..

1) **National Priority List for Federal Superfund Cleanup:** Toxic sites nominated for cleanup under the Federal Superfund program. Annual compilation of special two-page detailed profiles of NPL sites. Also includes delisted NPL sites.
ASTM required.* Fannie Mae required.** Source: U. S. Environmental Protection Agency.[1]
Data attributes updated from: 5/2/2013. Data obtained by Toxics Targeting: 5/2/2013.
New Facilities updated through: 5/2/2013. Data obtained by Toxics Targeting: 5/2/2013.

2) **Inactive Hazardous Waste Disposal Site Registry:** New York State database that maintains information and aids decision making regarding the investigation and cleanup of toxic sites. The Registry's data includes two-page profiles noting site name, ID number, description, classification, cleanup status, types of cleanup, owner information, types and quantities of contaminants, and assessment of health and environmental problems. Also included are sites that qualify for possible inclusion on the Registry. These Registry Qualifying sites may or may not be on the Site Registry.
ASTM required.* Fannie Mae required.** Source: New York State Department of Environmental Conservation.[2]
Data attributes updated through: 5/2/2013. Data obtained by Toxics Targeting: 5/2/2013.
New Facilities updated to: 5/2/2013. Data obtained by Toxics Targeting: 5/2/2013.

3) **Corrective Action Activity (CORRACTS):** U. S. Environmental Protection Agency database of hazardous facilities regulated pursuant to the Resource Conservation and Recovery Act (RCRA).
ASTM required.* Fannie Mae required.** Source: U. S. Environmental Protection Agency[1]
Data attributes updated through: 10/17/2013. Data obtained by Toxics Targeting: 10/30/2013.
New facilities updated through: 10/17/2013. Data obtained by Toxics Targeting: 10/30/2013.

4) **CERCLIS:** Toxic sites listed in the Federal Comprehensive Environmental Response, Compensation and Liability Information System. Includes Active and No Further Remedial Action Planned (NFRAP) sites.
ASTM required.* Fannie Mae required.** Source: U. S. Environmental Protection Agency.[1]
Data attributes updated through: 4/25/2013. Data obtained by Toxics Targeting: 7/2/2013.
New Facilities updated through: 4/25/2013. Data obtained by Toxics Targeting: 7/2/2013.

5) **Brownfield Programs:** NYS programs for sites that are abandoned, idled or under-used industrial and/or commercial sites where expansion or redevelopment is complicated by real or perceived environmental contamination.
ASTM required.* Source: New York State Department of Environmental Conservation.[2]
Data attributes updated through: 5/2/2013. Data obtained by Toxics Targeting: 5/2/2013.
New Facilities updated to: 5/2/2013. Data obtained by Toxics Targeting: 5/2/2013.

(a) **Brownfield Cleanup Program (BCP)**
(b) **Voluntary Cleanup Program (VCP)**
(c) **Environmental Restoration Program (ERP)**

6) **Solid Waste Facilities: NYS Solid Waste Registry**, including, but not limited to, landfills, incinerators, transfer stations, recycling centers.
ASTM required.* Fannie Mae required.** Source: New York State Department of Environmental Conservation.[2]
Data updated to: 12/31/2001. Data obtained by Toxics Targeting: 3/16/2002.

7) **RCRA Hazardous Waste Treatment, Storage or Disposal Facility Databases:**

(a) **Manifest Information:** New York State database of hazardous waste facilities and shipments regulated by the DEC's Bureau of Hazardous Waste Facility Compliance pursuant to NYS Law and the Resource Conservation and Recovery Act (RCRA).
ASTM required.* Fannie Mae required.** Source: New York State Department of Environmental Conservation.[2]

New facilities updated through: 10/25/2013. New facilities obtained by Toxics Targeting: 11/5/2013.
Manifest transactions data updated to: 10/25/2013. Manifest transactions data obtained by Toxics Targeting: 11/5/2013.

(b) **RCRA Notifier & Violations Information:** U. S. Environmental Protection Agency database of hazardous facilities regulated pursuant to the Resource Conservation and Recovery Act (RCRA).
ASTM required.* Fannie Mae required.** Source: U. S. Environmental Protection Agency[1]
New facilities updated through: 10/17/2013. Data obtained by Toxics Targeting: 10/30/2013.
Data attributes updated through: 10/17/2013. Data obtained by Toxics Targeting: 10/30/2013.

8) **Spills Information Database:** Spills reported to the DEC as required by one or more of the following: Article 12 of the Navigation Law, 6 NYCRR Section 613.8 (from Petroleum Bulk Storage Regulations) or 6 NYCRR Section 595.2 (from Chemical Bulk Storage Regulations). This database includes both *active* and *closed* spills.
ASTM required.* Fannie Mae.** Source: NYS Department of Environmental Conservation.[2]

New spills through: 9/20/2013 New spills data obtained by Toxics Targeting: 9/20/2013
Spill attribute data through: 9/20/2013 Spill attribute data obtained by Toxics Targeting: 9/20/2013

Active spills: paperwork not completed. Closed spills: paperwork completed.
Both active and closed spills may or may not have been cleaned up (see Date Cleanup Ceased in spill profiles).

9) **Major Oil Storage Facilities:** NYS database of facilities licensed pursuant to Article 12 of the Navigation Law, 6NYCRR Parts 610 and 17NYCRR Part 30, such as onshore facilities or vessels, with petroleum storage capacities equal to or greater than 400,000 gallons. **Tank and other data withheld by NYSDEC as of 4/1/2002**.
ASTM required.* Fannie Mae required.** Source: New York State Department of Environmental Conservation.[2]

Data updated through: 7/19/2013. Data obtained by Toxics Targeting: 7/19/2013.

10) **Petroleum Bulk Storage Facilities:** County or State databases of aboveground and underground petroleum storage facilities.
ASTM required.* Fannie Mae required.**

All New York Counties except Cortland, Nassau, Rockland, Suffolk:
NYS Petroleum Bulk Storage Database. This includes all New York State counties except Cortland, Nassau, Rockland, Suffolk, and Westchester. ASTM required.* Fannie Mae required.**
Source: NYS Department of Environmental Conservation.[2]
New facilities updated through: 7/19/2013. Data obtained by Toxics Targeting: 7/19/2013.
Tank data updated through: 7/19/2013. Data obtained by Toxics Targeting: 7/19/2013.

Westchester County: Data updated through 10/1/1998

Cortland County: **Cortland County Health Dept. Tank database**.
Source: Cortland County Health Department[7]
Data updated through: 7/15/2004 Data obtained by Toxics Targeting: 7/23/2004

Nassau County: a compilation of the following 2 databases:
Heat producing products and other products:
Source: Nassau County Department of Health.[3]
NOTE: This data is being withheld by the Nassau County DOH
Data updated through: 4/1/2001. Data obtained by Toxics Targeting: 1/2/2002

Generally non-heat producing products:
Source: Nassau County Fire Marshal.[4]
Data updated through: 8/6/2009. Data obtained by Toxics Targeting: 9/22/2009

Rockland County: **Rockland County Dept. of Health Tank database.**
Source: Rockland County Department of Health.[5]
Data updated through: 4/13/2004. Data obtained by Toxics Targeting: 4/16/2004.

Suffolk County: **Suffolk County Dept. of Health Article 12 database**
Source: Suffolk County Department of Health Services.[6]
Data updated through: 6/21/2005. Data obtained by Toxics Targeting: 7/12/2006.

11) **RCRA Hazardous Waste Generators and/or Transporters Databases:**
(a) **Manifest Information:** New York State database of hazardous waste facilities and shipments regulated by the NYS Department of Environmental Conservation's Bureau of Hazardous Waste Facility Compliance pursuant to New York State Law.
ASTM required.* Fannie Mae required.** Source: New York State Department of Environmental Conservation.[2]

New facilities updated through: 10/25/2013. New facilities obtained by Toxics Targeting: 11/5/2013.
Manifest transactions data updated to: 10/25/2013. Manifest transactions data obtained by Toxics Targeting: 11/5/2013.

(b) **RCRA Notifier & Violations Information:** U. S. Environmental Protection Agency database of hazardous facilities regulated pursuant to the Resource Conservation and Recovery Act (RCRA).
ASTM required.* Fannie Mae required.** Source: U. S. Environmental Protection Agency[1]

New facilities updated through: 10/17/2013. Data obtained by Toxics Targeting: 10/30/2013.
Data attributes updated through: 10/17/2013. Data obtained by Toxics Targeting: 10/30/2013.

12) **Chemical Bulk Storage Facilities:** New York State database of facilities compiled pursuant to 6NYCRR Part 596 that store regulated substances listed in 6NYCRR Part 597 in aboveground tanks with capacities greater than 185 gallons and /or in underground tanks of any size. **Tank and other data withheld by NYSDEC as of 4/1/2002**.
ASTM required.* Fannie Mae required.** Source: New York State Department of Environmental Conservation.[2]
Data updated through: 7/19/2013. Data obtained by Toxics Targeting: 7/19/2013.

13) **Hazardous Substance Waste Disposal Site Study:** NYS database of waste disposal sites that may pose threats to public health or the environment, but could not be remediated using monies from the Hazardous Waste Remedial Fund.
Source: New York State Department of Environmental Conservation.[2]
Data updated to: 5/16/2000. Data obtained by Toxics Targeting: 5/16/2000.

14) **Toxic Release Inventory (TRI):** Federal database of manufacturing facilities required under Section 313 of the Federal Emergency Planning and Community Right-to-Know Act to report releases to the air, water and land of any specifically listed toxic chemical. See Fannie Mae requirement** below.
Source: U. S. Environmental Protection Agency.[1] / NYS Department of Environmental Conservation[2]
Data updated through: 3/8/2004. Data obtained by Toxics Targeting: 3/25/2004

15) **Toxic Wastewater Discharges (Permit Compliance System):** Federal database of discharges of wastewater to surface waters and groundwaters. See Fannie Mae requirement** below. Source: U. S. Environmental Protection Agency.[1]
Data updated through: 6/17/2004. Data obtained by Toxics Targeting: 7/19/2004.

16) **Air Discharge Facilities:** EPA AIRS database containing address information on each air emission facility and the type of air pollutant emission it is. Compliance information is also provided on each pollutant as well as the facility itself.
See Fannie Mae requirement** below. Source: U. S. Environmental Protection Agency[1]
Data updated through: 11/24/1999. Data obtained by Toxics Targeting: 1/6/2000

17) **Civil Enforcement & Administrative Docket:** This database is the U. S. EPA's system for tracking administrative and civil judiciary cases filed on behalf of the agency by the Department of Justice. Fannie Mae required.**
Source: U. S. Environmental Protection Agency.[1]
New Sites through: 10/14/1999.
Data updated through: 10/14/1999. Data obtained by Toxics Targeting: 11/18/1999.

18) **Emergency Response Notification System (ERNS):** Federal database of spills compiled by the Emergency Response Notification System. On-site searches only.
ASTM required.* See Fannie Mae requirement** below. Source: U. S. Environmental Protection Agency.[1]
Data updated through: 1/31/2000. Data obtained by Toxics Targeting: 2/15/2000

* American Society of Testing Materials: Standard Practice on Environmental Site Assessments: Phase I Environmental Site Assessment Process (E1527-05).
** Fannie Mae's Part X Environmental Hazards Management Procedures specify 1.0 mile searches for "any state or Federal list of hazardous waste sites (e.g. CERCLIS, HWDMS etc.)." Searches for the property and adjacent properties are specified for "chemical manufacturing plants," "obvious high risk neighbors engaging in storing or transporting hazardous waste, chemicals or substances" and "...any documented or visible evidence of dangerous waste handling... (e.g. stressed vegetation, stained soil, open or leaking containers, foul fumes or smells, oily ponds, etc." Searches for property and adjacent properties can include sites up to a quarter mile away (W. Hayward, Director, Multi-Family Business Planning and Control, Fannie Mae, personal communication, 5/94).

[1]U. S. Environmental Protection Agency, 290 Broadway, NY, NY 10007-1866.

[2]NYS Department of Environmental Conservation, 625 Broadway, Albany, NY 12233.

[3]Nassau County Department of Health, Bureau of Land Resources Management, 240 Old Country Road, Mineola, NY 11501.

[4]Nassau County Fire Commission, Office of the Fire Marshal, 899 Jerusalem Avenue, P. O. Box 128, Uniondale, NY 11553.

[5]Rockland County Department of Health, The Dr. Robert Yeager Health Center, Building D, Sanitorium Road, Pomona, NY 10970.

[6]Suffolk County Department of Health, Hazardous Materials Management, 15 Horseblock Place, Farmingville, NY 11738-1220.

[7]Cortland County Department of Health, 60 Central Avenue, Cortland, NY 13045-2746

APPENDIX E

Profile Sheets

Property Inventory Form

Project Name:	Riverhead BOA Step II Nomination
Identification No.	Strategic Site 1
Street Address:	1863 West Main Street, Riverhead
Tax Map Number(s):	600 – 118 – 4 – 8.1
PROPERTY INFORMATION	
Owner:	Edward Densieski
Property Size (SF):	67,501.97 SF
Property Size (ac):	1.55 acres
Existing Land Use:	Dynamic Automotive (automobile service)
Zoning:	Riverfront Corridor (RFC)
Parking:	The site contains a large parking area.
Public Water Available:	Not within the Riverhead Water District Boundary
Size of Water Main:	12" water mains near the site
Notes: (redevelopment potential, whether it could be a strategic site, access issues, noise/air issues).	The site is located in a highly visible as one of the first properties encountered by motorists after exiting the LIE onto West Main Street eastbound. The property is close to Tanger Outlets - a major visitor attraction. Although this site is currently developed with an auto use, the site has the potential to be redeveloped as a more appropriate gateway use.
BUILDING DESCRIPTION	
Historic District:	N/A
Building Size:	2,271 SF in coverage
# of Stories:	1 story
Condition:	Fair
Building Description:	Brick façade with garage doors for use as automotive repairs.
Accessory Building:	298 SF building and 150' monopole located behind main building
ADJACENT LAND USES:	
North:	Study area boundary, commercial uses (Tanger outlets)
South:	LIRR, Former duck farm, vacant land
East:	Open space, vacant land
West:	Vacant property and mobile homes
TRANSPORTATION ENVIRONMENT:	
Walk Score:	29 – Car Dependent *See www.walkscore.com for more information
Bus Stop within ¼ mile?	Yes
Sidewalks:	Yes
Past Land Use if not in use (note sources):	Gas station

ENVIRONMENTAL RESOURCES:

	YES	NO
Special Flood Hazard Area		☑
Central Suffolk SGPA	☑	
Area of Potential Archaeological Sensitivity		☑
Within 300' of Tidal Wetlands		☑
Within 300' of Freshwater Wetlands	☑	
WSRR **(Recreation)**	☑	

FEMA Flood Zone: **N/A**
Groundwater Management Zone: **III**
Soil Type: **Carver and Plymouth sands 3-15% slope (CpC)**
Depth to Groundwater: **Site ranges from 0-10 feet**
Groundwater Contributing Area (travel time in surface water): **Site is split between 2-5 and 5-10 year ranges**

HISTORY OF ENVIRONMENTAL CONTAMINATION:

	YES	NO
CERCLA (Superfund) Site		X
RCRA Generator		X
Hazardous Materials Storage Site		X
BCP Site		X
VCP Site		X
Previous Spill Site		X
If Yes, was the spill closed?	-	-

Local Contamination (based upon available info from EPA or NYSDEC)
Include links to any documentation of prior environmental contamination.
Evidence of contamination (Observations)

Property is registered as a Petroleum Bulk Storage Site. Seven prior UST (one waste oil and six fuel tanks) were removed prior to 1985. No current records of contamination.

See Alternative Scenario Site ID: W2

Property Inventory Form

Project Name:	Riverhead BOA Step II Nomination
Identification No.	Strategic Site 2
Street Address:	1751 West Main Street
Tax Map Number(s):	600 – 118 – 4 – 10
PROPERTY INFORMATION	
Owner:	Spirit SPE Ptfolio 2007-2 LLC
Property Size (SF):	240,377 SF
Property Size (ac):	5.52 acres
Existing Land Use:	Vacant buildings - former commercial lumberyard
Zoning:	Riverfront Corridor (RFC)
Parking:	Site is mostly paved which would provide ample parking.
Public Water Available:	Yes
Size of Water Main:	12”
Notes: (redevelopment potential, whether it could be a strategic site, access issues, noise/air issues).	The 84 Lumber site provides a gateway opportunity, which could provide a location for a visitor center with related services. Such a facility could include use of the existing rail siding on the property for a shuttle train in the future between downtown Riverhead and the visitor center and could be achievable with the new WSRR Community designation. The property has high visibility on the corridor and has been vacant since 2013.
BUILDING DESCRIPTION	
Historic District:	N/A
Building Size:	40,237 SF in coverage for all buildings
# of Stories:	2 stories
Condition:	Abandoned buildings - somewhat deteriorated condition
Building Description:	Site contains 1 (20,294 SF) large storage building with boarded up windows and doors.
Accessory Buildings:	Site also contains 2 large vacant warehouses (13,591 SF and 6,353 SF).
ADJACENT LAND USES:	
North:	Study area boundary, Tanger Outlets and Fairfield Apartment complex
South:	LIRR tracks, open space, residential
East:	Commercial auto repair
West:	Open space
TRANSPORTATION ENVIRONMENT:	
Walk Score:	42 – Car Dependent *See www.walkscore.com for more information
Bus Stop within ¼ mile?	Yes
Sidewalks:	Yes

Past Land Use (note sources):	Formerly 84 Lumber

ENVIRONMENTAL RESOURCES:

	YES	NO
Special Flood Hazard Area		☑
Central Suffolk SGPA	☑	
Area of Potential Archaeological Sensitivity		☑
Within 300' of Tidal Wetlands		☑
Within 300' of Freshwater Wetlands		☑
WSRR **(Recreation)**	☑	

FEMA Flood Zone: **N/A**
Groundwater Management Zone: **III**
Soil Type: **Riverhead sandy loam 3-8% slopes (RdB), Cut and fill land gently sloping (CuB), Plymouth loamy sand 3-8% slopes (PlB)**
Depth to Groundwater: **Site ranges from 2 ft to over 10 ft, about half of the site is in the over 10 ft area.**
Groundwater Contributing Area (travel time in surface water): **2-10 years**

HISTORY OF ENVIRONMENTAL CONTAMINATION:

	YES	NO
CERCLA (Superfund) Site		X
RCRA Generator		X
Hazardous Materials Storage Site		X
BCP Site		X
VCP Site		X
Previous Spill Site		X
If Yes, was the spill closed?	-	-

Local Contamination (based upon available info from EPA or NYSDEC)
Include links to any documentation of prior environmental contamination.
Evidence of contamination (Observations)

No records of previous contamination reported.

See Alternative Scenario ID: W3

Property Inventory Form

Project Name:	Riverhead BOA Step II Nomination
Identification No.	Strategic Site 3
Street Address:	1501-1595 and 1581 West Main Street, Riverhead
Tax Map Number(s):	600 – 119 – 2 – 56, 57, & 58
PROPERTY INFORMATION	
Owner:	Alison Ho
Property Size (SF):	704,093 sf
Property Size (ac):	16.16 acres
Existing Land Use:	Former duck farm, vacant land
Zoning:	Riverfront Corridor (RFC)
Parking:	The site does not contain any paved parking areas.
Public Water Available:	Yes
Size of Water Main:	12”
Notes:	This site is highly visible site on West Main Street is now overgrown and contains an abandoned deteriorating building visible from the roadway. The site is over 16 acres and thus provides an opportunity for redevelopment. However, the WSRR designation (Recreational) limits the use of the property to residential, or potentially lodging related to river recreation and river related retail. A portion of the site is located within regulated freshwater wetlands.
BUILDING DESCRIPTION	
Historic District:	N/A
Building Size:	Three buildings totaling: 3,425 SF in coverage
# of Stories:	Main building is 2-story
Condition:	Poor
Building Description:	There are a total of three buildings remaining on the property and several foundations. Largest building is a 2 story residential style building with a footprint of 1,400 SF and is boarded up.
Accessory Building:	Two other buildings set back from road from prior duck farm operations.
ADJACENT LAND USES:	
North:	Vacant, commercial
South:	Study boundary, Peconic River
East:	Utilities
West:	Residential and mobile home park on Forge Road
TRANSPORTATION ENVIRONMENT:	
Walk Score:	28 – Car Dependent *See www.walkscore.com for more information
Bus Stop within ¼ mile?	Yes
Sidewalks:	Yes

Past Land Use (note sources):	The site was previously used as a duck farm and is currently vacant. The Bridge View Duck Farm operated on this site between 1966 and 2001.

ENVIRONMENTAL RESOURCES:

	YES	NO
Special Flood Hazard Area	☑	
Central Suffolk SGPA		☑
Area of Potential Archaeological Sensitivity	☑	
Within 300' of Tidal Wetlands		☑
Within 300' of Freshwater Wetlands	☑	
WSRR **(Recreation)**	☑	

FEMA Flood Zone: **The site is adjacent to and slightly overlapping Flood Zone A.**
Groundwater Management Zone: **III**
Soil Type: **Plymouth loamy sand 0-3% slopes (PlA), Carver and Plymouth sands 3-15% slopes (CpC), Berryland mucky sand (Bd), Cut and fill land gently sloping (CuB), Plymouth loamy sand 3-8% slopes (PlB)**
Depth to Groundwater: **Most of the site is within the 0-2 feet range except for the northern portion of the site which reaches above 10 feet.**
Groundwater Contributing Area (travel time in surface water): **0-2 years**

HISTORY OF ENVIRONMENTAL CONTAMINATION:

	YES	NO
CERCLA (Superfund) Site		x
RCRA Generator		x
Hazardous Materials Storage Site		x
BCP Site		x
VCP Site		x
Previous Spill Site		x
If Yes, was the spill closed?	-	-

Local Contamination (based upon available info from EPA or NYSDEC)
Include links to any documentation of prior environmental contamination.
Evidence of contamination (Observations)

No records of environmental contamination on site based upon database search.

It is noted that residual waste products from the prior duck farm use (consisting of buried remains, duck sludge) could remain on the site and if present would need to be removed prior to redevelopment. Another benefit that can be achieved through the redevelopment of this site is the removal of invasive species (namely *phragmites australis*) and revegetation of the shoreline with native vegetation that can provide habitat and food sources for local wildlife.

See Alternative Scenario ID: W5

Property Inventory Form

Project Name:	Riverhead BOA Step II Nomination
Identification No.	Strategic Site 4
Street Address:	1141, 1153-1159, 1161, 1165, 1167, 1175, 1191, 1197, 1199, and 1205 West Main Street, Riverhead
Tax Map Number(s):	600 – 125 – 2 – 23, 25.1, 25.2, 26.2, 27.2, 27.3, 27.5 & 28 600 – 119 – 2 – 21 & 22
PROPERTY INFORMATION	
Owners:	Matthew A. Alfaro, David Osman, Roy Osman, David Lee Fulton, ZBA Holdings Inc., Dev 2074 Inc., Sally Osman, Bertha Pfliger
Property Size (SF):	259,442 SF for all parcels
Property Size (ac):	5.96 acres for all parcels
Existing Land Use:	Commercial (Alfaro Motors, Buoy One Seafood Market, D&T Irrigation Center) and residential
Zoning:	Riverfront Corridor (RFC)
Parking:	Many of the parcels contain parking areas.
Public Water Available:	Yes
Size of Water Main:	8”- 12”
Notes: (redevelopment potential, whether it could be a strategic site, access issues, noise/air issues).	Some of the existing uses located at this site are preexisting nonconforming uses because of the WSRR Recreational designation. This site was identified by the community as a priority for redevelopment. The property is very visible due to its location on the curve on Main Street. The property is also considered a gateway to the downtown which provides an opportunity for the site to be redeveloped into the Peconic Overlook Concept, which would improve aesthetics and community character, add tourism based features, improve water quality, remove automotive uses, and incorporate stormwater management and sewage treatment.
BUILDING DESCRIPTION	
Historic District:	None
Building Size:	27,622 SF of coverage for 17 buildings and accessory structures
# of Stories:	The site contains a variety of one and two story buildings.
Condition:	Fair and poor condition
Building Description:	The site contains many buildings of what appears to be residential and commercial uses.
Accessory Building:	Accessory buildings located far from the road.
ADJACENT LAND USES:	
North:	Commercial, residential, utilities, institutional
South:	Study boundary, Peconic River
East:	Commercial, utilities, residential
West:	Commercial

Photo of one of the properties

TRANSPORTATION ENVIRONMENT:	
Walk Score:	28 – Car Dependent *See www.walkscore.com for more information
Bus Stop within ¼ mile?	Yes
Sidewalks:	Yes
Past Land Use (note sources):	

ENVIRONMENTAL RESOURCES:

	YES	NO
Special Flood Hazard Area	☑	
Central Suffolk SGPA		☑
Area of Potential Archaeological Sensitivity	☑	
Within 300' of Tidal Wetlands		☑
Within 300' of Freshwater Wetlands	☑	
WSRR **(Recreation)**	☑	

FEMA Flood Zone: **A**
Groundwater Management Zone: **III**
Soil Type: **Deerfield sand (De), Carver and Plymouth sands 3-15% slopes (CpC)**
Depth to Groundwater: **4-10 ft**
Groundwater Contributing Area (travel time in surface water): **0-2 years**

HISTORY OF ENVIRONMENTAL CONTAMINATION:

	YES	NO
CERCLA (Superfund) Site		X
RCRA Generator		X
Hazardous Materials Storage Site		X
BCP Site		X
VCP Site		X
Previous Spill Site		X
If Yes, was the spill closed?	-	-

Local Contamination (based upon available info from EPA or NYSDEC)
Include links to any documentation of prior environmental contamination.
Evidence of contamination (Observations)

See Alternative Scenario ID: C1

No records of previous contamination reported on the properties.

Property Inventory Form

Project Name:	Riverhead BOA Step II Nomination
Identification No.	Strategic Site 5
Street Address:	Train Station Block, located along Railroad Avenue between Griffing Avenue and Osborn Avenue
Tax Map Number(s):	Train Station Parking (numerous parcels) and 600 – 128 – 3 – 12.1, 12.2, 12.3, 13, 14, 15, 17.1, & 18
PROPERTY INFORMATION	
Owner:	161-163 Railroad St LLC., Madeline Rosen, Maxman Management LLC., Oscar Viera, Ramon Jiminez, Richard Israel, Janusz Koziol, Brandy Corp, 120 Court St Corp, Town of Riverhead (parking)
Property Size (SF):	132,330 SF for all parcels
Property Size (ac):	3.04 acres for all parcels
Existing Land Use:	Parking, residential, multiuse, commercial
Zoning:	Office (DC-3)
Parking:	Site contains large parking lot and some smaller parking areas including driveways for private residences.
Public Water Available:	Yes
Size of Water Main:	6”
Notes: (redevelopment potential, whether it could be a strategic site, access issues, noise/air issues).	The site includes train station parking and a nearby mixed use block. The area is an optimal location for mixed use development, especially multifamily, because of the close proximity to transit, Downtown Riverhead, and employment opportunities. Additionally, the area would benefit from the addition of a parking garage on this site to free up surface parking for other uses.
BUILDING DESCRIPTION	
Historic District:	Town Historic District
Building Size:	18,746 SF of coverage for all buildings on site.
# of Stories:	1 and 2 story buildings
Condition:	Fair to Poor
Building Description:	This site contains numerous 1 and 2 story buildings comprised of commercial and residential uses as well as a large parking lot.
Accessory Building:	N/A
ADJACENT LAND USES:	
North:	Train Station, study boundary, LIRR train tracks
South:	Institutional, residential, commercial
East:	Commercial
West:	Institutional, vacant, commercial, multiuse

TRANSPORTATION ENVIRONMENT:	
Walk Score:	70 – Very Walkable *See www.walkscore.com for more information
Bus Stop within ¼ mile?	Yes
Sidewalks:	Yes
Past Land Use (note sources):	Mix of commercial and parking

ENVIRONMENTAL RESOURCES:

	YES	NO
Special Flood Hazard Area		☑
Central Suffolk SGPA		☑
Area of Potential Archaeological Sensitivity	☑	
Within 300' of Tidal Wetlands		☑
Within 300' of Freshwater Wetlands		☑
WSRR		☑

FEMA Flood Zone: **N/A**
Groundwater Management Zone: **III**
Soil Type: **Urban land (Ur), Cut and fill land gently sloping (CuB)**
Depth to Groundwater: **Over 10 ft**
Groundwater Contributing Area (travel time in surface water): **0-2 years**

HISTORY OF ENVIRONMENTAL CONTAMINATION:

	YES	NO
CERCLA (Superfund) Site		X
RCRA Generator		X
Hazardous Materials Storage Site		X
BCP Site		X
VCP Site		X
Previous Spill Site		X
If Yes, was the spill closed?	-	-

Local Contamination (based upon available info from EPA or NYSDEC)
Include links to any documentation of prior environmental contamination.
Evidence of contamination (Observations)

See Alternative Scenario ID: D1

There are no records of previous contamination reported on the site, however, individual properties would require additional investigation into the historic land uses, potential for USTs, and other contamination sources.

Property Inventory Form

Project Name:	Riverhead BOA Step II Nomination
Identification No.	Strategic Site 6
Street Address:	944 East Main Street, Riverhead
Tax Map Number(s):	600 – 109 – 2 – 13
PROPERTY INFORMATION	
Owner:	Sap Realty Inc.
Property Size (SF):	9,779.56 SF
Property Size (ac):	0.22 acres
Existing Land Use:	SAP Enterprises (automotive repair)
Zoning:	Residence A-40 (RA40)
Parking:	Site is almost entirely paved for parking and use as auto repair.
Public Water Available:	Yes
Size of Water Main:	6-8”
Notes: (redevelopment potential, whether it could be a strategic site, access issues, noise/air issues).	This site is located along the gateway to the east end of Riverhead Downtown. Additionally, the site is near a freshwater pond that is a tributary to the Sawmill Creek and Peconic Estuary. The site currently contains an automotive repair facility which has the potential to impact the water quality of surface waters. The property is within an area that has little access to parks and redevelopment of the site into a park would provide recreational and community benefits as well as decrease the risk of contamination to adjacent creek.
BUILDING DESCRIPTION	
Historic District:	None
Building Size:	2,318 SF in coverage
# of Stories:	1 story
Condition:	Fair
Building Description:	The building has a small office/shop section and a large garage with 3 doors with high ceilings.
Accessory Building:	None
ADJACENT LAND USES:	
North:	Study area boundary, Open space
South:	Office, residential
East:	Commercial, industrial
West:	Residential
TRANSPORTATION ENVIRONMENT:	
Walk Score:	31 – Car Dependent *See www.walkscore.com for more information
Bus Stop within ¼ mile?	Yes
Sidewalks:	Yes
Past Land Use (note sources):	Same as current

ENVIRONMENTAL RESOURCES:

	YES	NO
Special Flood Hazard Area	☑	
Central Suffolk SGPA		☑
Area of Potential Archaeological Sensitivity		☑
Within 300' of Tidal Wetlands		☑
Within 300' of Freshwater Wetlands	☑	
WSRR		☑

FEMA Flood Zone: **AE, 7**
Groundwater Management Zone: **IV**
Soil Type: **Cut and fill land gently sloping (CuB)**
Depth to Groundwater: **2ft to over 8ft**
Groundwater Contributing Area (travel time in surface water): **5-10 years**

HISTORY OF ENVIRONMENTAL CONTAMINATION:

	YES	NO
CERCLA (Superfund) Site		X
RCRA Generator	X	
Hazardous Materials Storage Site		X
BCP Site		X
VCP Site		X
Previous Spill Site		X
If Yes, was the spill closed?	-	-

Local Contamination (based upon available info from EPA or NYSDEC)
Include links to any documentation of prior environmental contamination.
Evidence of contamination (Observations)

See Alternative Scenario ID: E2

This site is a PBS Facility and RCRA Generator of slight concern. According to the Toxics Targeting Report, the site is a PBS Facility but there is no detailed information about the tanks. The possibility of tanks located on the property cannot be ruled out. Additionally, there is a small quantity generator but it does not appear to present a major issue.

Property Inventory Form

Project Name:	Riverhead BOA Step II Nomination
Identification No.	Strategic Site 7
Street Address:	965 East Main Street, Riverhead
Tax Map Number(s):	600 – 131 – 1 – 1.1
PROPERTY INFORMATION	
Owner:	STA Holdings LLC
Property Size (SF):	101,394.48 SF
Property Size (ac):	2.33 acres
Existing Land Use:	Jet Vehicle Repair and Towing
Zoning:	Commercial/Residential Campus (CRC)
Parking:	Parking area surrounding the building.
Public Water Available:	Yes
Size of Water Main:	8”
Notes: (redevelopment potential, whether it could be a strategic site, access issues, noise/air issues).	Concerns about this site are related to its past and current auto related land use. On its own, the site is not a high priority however since it is adjacent to Strategic Site 8, it provides an opportunity for creating a more appropriate transitional use, such as multifamily housing.
BUILDING DESCRIPTION	
Historic District:	None
Building Size:	5,208 SF in coverage
# of Stories:	1 story
Condition:	Good
Building Description:	One story building with few windows and two garage doors for use as vehicle repair and towing.
Accessory Building:	None
ADJACENT LAND USES:	
North:	Study boundary, Outside of study area is a mix of residential and commercial uses.
South:	Office, residential
East:	Industrial, Strategic Site 8
West:	Residential, commercial
TRANSPORTATION ENVIRONMENT:	
Walk Score:	33 – Car Dependent *See www.walkscore.com for more information
Bus Stop within ¼ mile?	Yes
Sidewalks:	Yes
Past Land Use (note sources):	Auto uses

ENVIRONMENTAL RESOURCES:

	YES	NO
Special Flood Hazard Area	☑	
Central Suffolk SGPA		☑
Area of Potential Archaeological Sensitivity		☑
Within 300' of Tidal Wetlands		☑
Within 300' of Freshwater Wetlands	☑	
WSRR		☑

FEMA Flood Zone: **AE, 7**
Groundwater Management Zone: **IV**
Soil Type: **Cut and fill land gently sloping (CuB), Swansea muck 0-1% slopes coastal lowland (Mu)**
Depth to Groundwater: **Site contains a range from 0 feet to over 10 feet**
Groundwater Contributing Area (travel time in surface water): **2-10 years**

HISTORY OF ENVIRONMENTAL CONTAMINATION:

	YES	NO
CERCLA (Superfund) Site		X
RCRA Generator	X	
Hazardous Materials Storage Site		X
BCP Site		X
VCP Site		X
Previous Spill Site		X
If Yes, was the spill closed?	-	-

Local Contamination (based upon available info from EPA or NYSDEC)
Include links to any documentation of prior environmental contamination.
Evidence of contamination (Observations)

See Alternative Scenario ID: E3

This site is a PBS Facility and RCRA Generator of slight concern. The Toxics Targeting Report concluded that there is one underground tank located on the site. No additional information was provided regarding the RCRA Generator.

Property Inventory Form

Project Name:	Riverhead BOA Step II Nomination
Identification No.	Strategic Site 8
Street Address:	27 Hubbard Avenue, Riverhead
Tax Map Number(s):	600 – 131 – 1 – 2.2
PROPERTY INFORMATION	
Owner:	27 Hubbard Ave Assoc LLC
Property Size (SF):	157,308.15 SF
Property Size (ac):	3.61 acres
Existing Land Use:	Gershow Recycling
Zoning:	Commercial/Residential Campus (CRC)
Parking:	Lot has large gravel and paved areas for parking and use as recycling center.
Public Water Available:	Yes
Size of Water Main:	8”
Notes: (redevelopment potential, whether it could be a strategic site, access issues, noise/air issues).	The site currently is used as an auto salvage yard that is located near residential neighborhoods. The current use is a source of complaints related to noise, odors, and fugitive light. The site is a high priority because of its potential impact on groundwater in a Peconic Estuary contributing area and the incompatible land use. This property, along with the adjacent Strategic Site 7, would be suitable for multifamily housing.
BUILDING DESCRIPTION	
Historic District:	None
Building Size:	3,540 SF of coverage
# of Stories:	2 stories
Condition:	Poor
Building Description:	Large structure used as Gershow Recycling.
Accessory Building:	Accessory building of 1,637 SF located behind main building and away from the road. It is difficult to tell if the structure still exists.
ADJACENT LAND USES:	
North:	Study boundary, outside of study area is a mix of commercial and residential uses.
South:	Residential, Commercial
East:	Residential, multi-family – mobile homes
West:	Strategic Site 7 - Industrial
TRANSPORTATION ENVIRONMENT:	
Walk Score:	27 – Car Dependent *See www.walkscore.com for more information
Bus Stop within ¼ mile?	Yes
Sidewalks:	No
Past Land Use (note sources):	Same as current use.

ENVIRONMENTAL RESOURCES:

	YES	NO
Special Flood Hazard Area	☑	
Central Suffolk SGPA		☑
Area of Potential Archaeological Sensitivity		☑
Within 300' of Tidal Wetlands		☑
Within 300' of Freshwater Wetlands	☑	
WSRR		☑

FEMA Flood Zone: **AE, 7**
Groundwater Management Zone: **IV**
Soil Type: **Cut and fill land gently sloping (CuB), Muck 0-1% slopes coastal lowland (Mu)**
Depth to Groundwater: **Site contains a range from 0 feet to over 10 feet**
Groundwater Contributing Area (travel time in surface water): **2-5 years**

HISTORY OF ENVIRONMENTAL CONTAMINATION:

	YES	NO
CERCLA (Superfund) Site		X
RCRA Generator		X
Hazardous Materials Storage Site		X
BCP Site		X
VCP Site		X
Previous Spill Site		X
If Yes, was the spill closed?	-	-

Local Contamination (based upon available info from EPA or NYSDEC)
Include links to any documentation of prior environmental contamination.
Evidence of contamination (Observations)

See Alternative Scenario ID: E3

No records of previous contamination reported on the site, however, due to the property's history and current use as auto salvage, environmental testing would likely be necessary prior to redevelopment.

APPENDIX F

SONIR MODEL USER GUIDE AND MODEL RESULTS

SONIR MODEL USER'S GUIDE

Simulation of Nitrogen in Recharge (SONIR)
Nelson, Pope & Voorhis, LLC Microcomputer Model

INTRODUCTION

SONIR is a microcomputer model developed by Charles Voorhis for use by Nelson, Pope & Voorhis, LLC in order to simulate the hydrologic water budget of a site and determine total nitrogen and nitrogen present in recharge in connection with land use projects. The model was developed on the Microsoft Excel Spreadsheet (trademark of Microsoft Products) for IBM (trademark of International Business Machines, Inc.) or compatible Personal Computers capable of running Excel.

Nitrogen has been identified as a source of contamination primarily from sanitary discharge and lawn fertilization. Nitrogen is of concern as a drinking water contaminant, and there is an established health limit of 10 milligrams per liter (mg/l) in drinking water. Nitrogen is also of concern in surface water, as it is a nutrient that when present in high concentrations can cause algal blooms, resulting in biological oxygen demand as algae is biologically decomposed. Depleted oxygen in surface waters causes conditions unfavorable to fish species and can result in extremely undesirable aesthetic impacts, primarily related to odors. Accordingly, it is necessary to understand the concentration of nitrogen recharge as related to a proposed site development.

Utilizing a mass-balance concept, and applying known hydrologic facts and basic assumptions, it is possible to predict the concentration of nitrogen in recharge to the shallow aquifer underlying a given site. This prediction can in turn be used to determine impacts and significance of impacts in consideration of hydrogeologic factors. Similar techniques have been used to simulate nitrogen in recharge as published by the New York State Water Resources Institute, Center for Environmental Research at Cornell University, Ithaca, New York (**Hughes and Pacenka, 1985**). SONIR is intended to provide a more versatile model based upon the BURBS Mass-Balance concept. SONIR allows for use of the model to predict nitrogen impact from many sources including sewage treatment plants, and further allows for determination of a wider variety site recharge components under the hydrologic water budget section. SONIR has more versatility in the input of information, and also provides a printout of each step performed by the model, in order for regulatory agencies and review entities to understand how values are derived.

This text describes in detail the definition of terms, supported by referenced information regarding input of data for the simulation. The concept of determining the concentration of nitrogen in recharge involves a predication of the weight of nitrogen introduced to the site, as compared to the quantity of recharge resulting from precipitation and wastewater water discharge. Losses due to evapotranspiration and runoff must be accounted for in the simulation. The values and relationship associated with these parameters determines the quantity of recharge which enters the site. The prediction is generally annualized due to the availability of average

annual hydrologic data; however, data input can be determined on a seasonal basis if information is available.

The model includes four (4) data sheets identified as follows:

* Data Input Field - Sheet 1
* Site Recharge Computations - Sheet 2
* Site Nitrogen Budget - Sheet 3
* Nitrogen in Recharge Output Field - Sheet 4

All information required by the model is input in Sheet 1 - Data Input Field. Sheets 2 and 3 utilize data from Sheet 1 to compute the Site Recharge and the Site Nitrogen Budget. Sheet 4 utilizes the total values from Sheets 2 and 3 to perform the final Nitrogen in Recharge computations. Sheet 4 also includes tabulations of all conversion factors utilized in the model.

It should be noted that the simulation is only as accurate as the data which is input into the model. An understanding of hydrologic principles is necessary to determine and justify much of the data inputs used for water budget parameters. Further principles of environmental science and engineering are applied in determining nitrogen sources, application and discharge rates, degradation and losses, and final recharge. Users must apply caution in arriving at assumptions in order to ensure justifiable results.

SITE RECHARGE COMPUTATIONS

Overview

SONIR utilizes the basic hydrologic equation for determining the quantity of recharge anticipated by subtracting recharge losses from total precipitation. The quantity of recharge resulting from a given site is determined using the hydrologic budget equation **(Koszalka, 1984; p. 19):**

$$R = P - (E + Q)$$

where:
R = recharge
P = precipitation
E = evapotranspiration
Q = overland runoff

The quantity of recharge must be determined for each type of land use existing on a site, in order to determine the resultant site recharge. Surfaces commonly considered include: impervious surfaces; turfed areas; and natural areas; however, SONIR allows for a variety of land cover types to be considered in the model. In addition, site recharge occurs as a result of irrigation and wastewater discharge. In cases where water is imported to a site via a public water system, this quantity of recharge must be considered as additional water recharged on site. SONIR allows for

all of these recharge components to be included in the simulation. Many sites have fresh surface water in the form of lakes and ponds. Precipitation falls upon these surfaces; however, such features generally act as a mechanism for water loss as a result of evaporation. SONIR includes a Water Area Loss component in determining the site Hydrologic Water Budget and in computing recharge nitrogen.

Data Input - Sheet 1

The following provides a discussion of data sources and assumptions associated with the hydrologic water budget, corresponding to the Data Input Field in Sheet 1 of SONIR:

1. *Area of Site* - The total area of the site (in acres) which is capable of recharging precipitation is entered in this data cell. For sites which include tidal wetlands, the area which is inundated by tidal waters should be excluded, as recharge from these areas should not be considered in the context of nitrogen simulation. For sites which include surface water, the area can be included, provided evaporative water loss from surface water is considered by entering the acreage of surface water in Data Cell 15 noted below.

2. *Precipitation Rate* - Precipitation in the form of rainfall and snowmelt is determined using long term recorded values from local weather stations. Cornell University maintains the Northeast Regional Climate Center, from which long term precipitation data for Long Island weather stations is available. Monthly precipitation averages are published for the period 1951-1980 in Thornthwaite and Mather's Climatic Water Budget Method **(Snowden and Pacenka, 1985).** A tabulation of monthly and annual precipitation averages excerpted from this reference is included in the table cited for Evapotranspiration values. Data entry is in inches.

3. *Acreage of Lawn* - The total area of lawn (in acres) is entered in this Data Cell. This area includes all lawn area whether it is irrigated, fertilized or unmaintained. If there is no lawn area, a value of zero (0) is entered.

4. *Fraction of Land in Lawn* - No entry need be made in this Data Cell. SONIR will compute the Fraction of Land in Lawn by dividing the lawn area by total area.

5. *Evapotranspiration from Lawn* - Evapotranspiration is the natural water loss attributed to evaporation and plant utilization. Rainwater which is evaporated and transpired by plants is returned to the atmosphere as vapor. There are various methods for determining evapotranspiration, including direct measure and calculation. A commonly recognized method is the Thornthwaite and Mather Climatic Water Budget Method. Evapotranspiration rates for various locations on Long Island have been determined by the U.S. Geological Survey as documented in Ground-Water-Recharge Rates in Nassau and Suffolk Counties, New York **(Peterson, 1987; p. 10).** The following general rates as a percent of total precipitation are excerpted from that reference:

Location	Soil Type	Vegetation	ET(in)	ET(%)
Bridgehampton	sandy loam	shallow root	21.2	46.6
	silt loam	shallow root	21.4	47.2
LaGuardia	sand	shallow root	24.2	52.9
	clay loam	shallow root	25.4	55.5
	sandy loam	moderate root	26.2	57.2
JFK Airport	sand	shallow root	22.5	53.8
	clay loam	shallow root	23.9	57.3
	sandy loam	moderate root	25.0	60.0
Mineola	sand	shallow root	22.4	47.8
	sand-silt	shallow root	23.8	51.0
	sandy loam	moderate root	25.1	53.7
	sandy loam	orchards	25.5	54.5
Patchogue	fine sand	mature forest	25.5	53.5
Riverhead	sandy loam	shallow root	22.4	49.3
		orchards	24.8	54.7
Setauket	sandy loam	mature forest	26.8	57.9
Upton	silt loam	deep root	23.9	48.4
	sandy loam	moderate root	23.0	46.5

6. *Runoff from Lawn* - Runoff is the quantity of water which travels overland during a precipitation event. Soil infiltration capacity is the critical factor in determining runoff; however, factors such as slope and vegetation also determine runoff characteristics to a lesser extent on Long Island because of soil conditions. Less urbanized areas of Long Island with characteristically dry soils with groundcover will have a low runoff percentage as a function of total precipitation, as compared to the more urbanized portions of western Long Island. Peterson **(1984; p. 14)** estimates runoff as a percent of total precipitation for Nassau County (2.1 percent); Suffolk County (0.7 percent), and Long Island in general (1.0 percent). If an average precipitation rate of 45 inches per year is assumed, runoff will vary from 0.31 to 0.94 inches. Lawn areas would be expected to be in the lower end of the range. Judgements of higher and lower runoff can be made on a site specific basis depending upon slope and groundcover types.

7. *Acreage of Impervious* - The total area of impervious surface (in acres) is entered in this Data Cell. This area includes paved driveways, parking areas, roofs, roads, etc. If there are no impervious surfaces, a value of zero (0) is entered.

8. *Fraction of Land Impervious* - No entry need be made in this Data Cell. SONIR will compute the Fraction of Land in Impervious by dividing the impervious area by total area.

9. *Evaporation from Impervious* - Impervious surfaces will allow water to evaporate, particularly during summer months. There is no vegetation, therefore there is no transpiration by plants. Evaporation from Impervious is estimated to be approximately 10 percent of total precipitation **(Hughes and Porter, 1983; p. 10).** This value accounts

for evaporation from parking lots and other surfaces during summer months, averaged over the entire year. This indicates that recharge/runoff would comprise the remaining 90 percent of precipitation. This assumption coincides with most drainage computations required by Code Subdivision Regulations for determined leaching pool capacity.

10. *Runoff from Impervious* - The approximation of Evaporation from Impervious would indicate that recharge/runoff would comprise the remaining 90 percent of precipitation as there are no other losses from impervious surfaces. In consideration of paved areas, runoff is not transported off the site or to surface water as a loss. Runoff is diverted to leaching pools and allowed to re-enter the hydrologic system beneath a given site. Therefore, in terms of site recharge computations, the value for Runoff from Impervious is zero (0).

11. *Acreage of Unvegetated* - The total acreage of unvegetated area is entered in this Data Cell. This area includes sand, barren soils, and porous drives and trails. If there is no unvegetated area, a value of zero (0) is used.

12. *Fraction of Land Unvegetated* - No entry need be made in this Data Cell. SONIR will compute the Fraction of Land Unvegetated by dividing the unvegetated area by total area.

13. *Evapotranspiration from Unvegetated* - Evapotranspiration from Unvegetated areas is determined in the same manner as described for Data Cell 5 above.

14. *Runoff from Unvegetated* - The runoff coefficients noted in the discussion for Data Cell 6 above, are applied to unvegetated areas on a site specific basis. Runoff in the middle to higher end of the range (0.7 to 2.1 percent of precipitation) are expected due to lack of groundcover vegetation.

15. *Acreage of Water* - SONIR considers evaporation from surface water in the computation of site recharge. Surface water, particularly groundwater fed lakes and ponds are a source of water loss in the water budget. The quantity of fresh surface water (in acres) is entered in this Data Cell.

16. *Fraction of Land in Water* - No entry need be made in this Data Cell. SONIR will compute the Fraction of Water on the site by dividing the water area by total area.

17. *Evaporation from Water* - Surface water features will cause evaporation of water in excess of normal evapotranspiration as documented by **Warren et al, 1968,** Hydrology of Brookhaven National Laboratory and Vicinity Suffolk County, New York. It is estimated that the upper limit of evaporation from a large free-water surface is approximately 30.00 inches per year **(Warren et al, 1968; p. 26).** This value is entered in Data Cell 17 as the most accurate approximation.

18. *Makeup Water* - SONIR allows for consideration of the impact of man-made lakes on site recharge. Lakes are generally lined with an impermeable material. Evaporation occurs

from the surface of the lake at a rate of 30.00 inches per year. In order to maintain a constant water level, an on-site well is generally installed to provide make-up water to the lake or pond. The quantity of make-up water is equivalent to the quantity of evaporation, given the fact that the function of the well is to replace water which is evaporated. Therefore, for cases where make-up water is used to maintain a constant water level, a value of 30.00 inches per year is entered in Data Cell 18.

19. *Acreage of Natural* - The total quantity of natural area (in acres) is entered in this Data Cell. This area includes naturally vegetated areas such as woodland, meadow, etc. If there is no natural area, a value of zero (0) is entered.

20. *Fraction of Land Natural* - No entry need be made in this Data Cell. SONIR will compute the Fraction of Land Natural by dividing the natural area by total area.

21. *Evapotranspiration from Natural* - Evapotranspiration from Natural areas is determined in the same manner as described for Data Cell 5 above.

22. *Runoff from Natural* - The runoff coefficients noted in the discussion for Data Cell 6 above, are applied to natural areas on a site specific basis. Generally lower values in the range of 0.7 percent of precipitation are expected due to groundcover and canopy vegetation.

23. *Acreage of Other Area* - This is a general category which can be used to include additional groundcover types in the simulation. Acreage of Other Area is entered (in acres). This Data Cell can be used to include site recharge considerations from a portion of the site which has different hydrologic properties, such as a moist hardwood forest or vegetated freshwater wetland, where evapotranspiration would be high and runoff would be extremely low.

24. *Fraction of Land in Other Area* - No entry need be made in this Data Cell. SONIR will compute the Fraction of Land in Other Area by dividing the land in other area by total area.

25. *Evapotranspiration from Other Area* - Evapotranspiration from Other areas is determined in the same manner as described for Data Cell 5 above. Value can be varied depending upon the hydrologic properties of the groundcover type.

26. *Runoff from Other Area* - The runoff coefficients noted in the discussion for Data Cell 6 above, are applied to Other Areas on a site specific basis. Value can be varied depending upon the hydrologic properties of the groundcover type.

27. *Acreage of Land Irrigated* - Imported water for irrigation purposes is an additional site recharge component not considered in any of the Data Cells above. The quantity of land irrigated on a given site is entered in this Data Cell (in acres).

28. *Fraction of Land Irrigated* - No entry need be made in this Data Cell. SONIR will compute the Fraction of Land Irrigated by dividing the land irrigated area by total area.

29. *Irrigation Rate* - The rate of irrigation must be entered in this Data Cell (in inches). Hughes and Porter **(1983; p. 19)** have indicated that lawn irrigation is estimated to be about 5.5 inches per year. This value is entered in Data Cell 29 as the most accurate approximation.

30. *Number of Dwellings* - The number of dwellings is entered in this Data Cell in order to allow for computation of wastewater disposal from residential use. Wastewater imported to a site, or even withdrawn from on site wells and recharged through sanitary effluent is an additional recharge component which must be considered. If the project is for a commercial use or utilizes a denitrification system, the number of dwellings should not be entered in the Data Entry Field, as the wastewater flow will include recharge and nitrogen components.

31. *Water Use per Dwelling* - The water use should correspond to the total site non-irrigation water use, divided by the number of units.

32. *Wastewater Design Flow* - No entry need be made in this Data Cell. SONIR will compute the Wastewater Design Flow by multiplying the Number of Dwellings by the Water Use per Dwelling.

33. *Commercial/STP Design Flow* - SONIR permits the consideration of recharge from commercial projects, denitrification systems and sewage treatment plants. The Commercial/STP Design Flow is entered in this Data Cell as per County Health Department or engineering design standards.

Site Recharge Computations - Sheet 2

Once data entry is complete for Site Recharge Parameters, SONIR will complete a series of detailed Water Budget computations for the overall site. The following describes the computations which are performed by the model:

A. *Lawn Area Recharge* - Lawn Area Recharge is determined by use of the basic Hydrologic Budget Equation [R = P - (E + Q)] as defined previously. The quantity of recharge determined by this method is then multiplied by that portion of the site occupied by Lawn Area to determine the component of Lawn Area Recharge in overall site recharge.

B. *Impervious Area Recharge* - Impervious area recharge is also determined using the Hydrologic Budget Equation; however, the value for runoff is zero (0) due to the fact that runoff is controlled by conveyance to on site leaching facilities or is allowed to runoff into depressions where runoff is recharged on site.

C. *Unvegetated Area Recharge* - Unvegetated Area Recharge is determined by use of the basic Hydrologic Budget Equation. The quantity of recharge determined by this method is then multiplied by that portion of the site occupied by Unvegetated Area to determine the component of Unvegetated Area Recharge in overall site recharge.

D. *Water Area Loss* - The Hydrologic Budget Equation is modified to consider Water Area Loss. This is particularly useful in water quantity stressed areas of Long Island. If runoff (Q) is considered be zero (0), then lake storage/recharge without make-up water would be Precipitation minus Evaporation (P - E). The resultant quantity of lake storage/recharge is then reduced by the amount of make-up water (M). The final quantity of loss is then multiplied by that portion of the site occupied by water to determine the component of water loss as related to the overall site water budget.

E. *Natural Area Recharge* - Natural Area Recharge is determined by use of the basic Hydrologic Budget Equation. The quantity of recharge determined by this method is then multiplied by that portion of the site occupied by Natural Area to determine the component of Natural Area Recharge in overall site recharge.

F. *Other Area Recharge* - Other Area Recharge is determined by use of the basic Hydrologic Budget Equation. The quantity of recharge determined by this method is then multiplied by that portion of the site occupied by Other Area to determine the component of Other Area Recharge in overall site recharge.

G. *Irrigation Recharge* - Irrigation recharge is an additional recharge component artificially added on sites where irrigation occurs. This quantity is determined in the same manner as the Hydrologic Water Budget except that the irrigation rate (in inches) is substituted for precipitation. The resultant recharge is multiplied by the area of the site which is irrigated in order to determine the Irrigation Recharge in overall site recharge.

H. *Wastewater Recharge* - Wastewater is also a recharge component artificially added to a site. SONIR annualizes the wastewater design flow and assumes it is applied over the entire by multiplying Wastewater Design Flow by the Area of the Site, resulting in a per foot measure of wastewater over the site. This is converted to inches to be included in overall site recharge.

Once the eight (8) series of Site Recharge Computations are complete, SONIR totals each individual component to determine Total Site Recharge. The sum of these recharge contributions, is that quantity of water which is expected to enter the site on an annual basis due to precipitation, after the development is completed. This value is important in determining the concentration of nitrogen in recharge, and is important as a means of determining hydrologic impacts of a project in terms of changes to site recharge.

SITE NITROGEN BUDGET

Overview

The total nitrogen released on a given site must be determined in order to provide a means of simulating nitrogen in recharge. Nitrogen sources include: sanitary nitrogen; fertilizer nitrogen; pet waste nitrogen; precipitation nitrogen; and water supply nitrogen (wastewater and irrigation). The total of these quantities represents total site nitrogen.

Data Input - Sheet 1

The following provides a discussion of data sources and assumptions associated with the nitrogen budget, corresponding to the Data Input Field in Sheet 1 of SONIR:

1. *Persons per Dwelling* - The number of persons per dwelling is a demographic multiplier used in the determination of human population of a site. Based on multipliers listed in "The New Practitioner's Guide to Fiscal Impact Analysis", (**Rutgers, 1985**), the average number of residents is calculated at 0.00/unit (Existing Conditions), and will be 4.1/unit (Proposed Conditions).

2. *Nitrogen per Person per Year* - Annual nitrogen per person is a function of nitrogen bearing waste in wastewater. For residential land use the population of the development is determined and the nitrogen generated is assumed to be 10 pounds per capita per year **(Hughes and Porter, 1983; p. 8).**

3. *Sanitary Nitrogen Leaching Rate* - For normal residential systems, Porter and Hughes report that 50 percent of the nitrogen entering the system is converted to gaseous nitrogen and the remainder leaches into the soil **(Porter and Hughes, 1983; p. 14).**

4. *Area of Land Fertilized 1* - The area of land fertilized is input in Data Cell 4. This value may correspond to the Acreage of Lawn and/or the Acreage of Land Irrigated, but is not necessarily the same value. This entry should be determined on a site-specific basis.

5. *Fertilizer Application Rate 1* - Fertilizer nitrogen is determined by a fertilizer application rate over a specified area of the site. The fertilizer application rates vary depending upon the type of use. The following table indicates the rate of fertilization as a function of use as excerpted from the Nonpoint Source Management Handbook **(Koppelman, 1984; Chapter 5, p.6):**

Residential (contract)	1.5 lbs/1000 sq ft
Residential (unmanaged)	2.3 lbs/1000 sq ft
Commercial	3.5 lbs/1000 sq ft
Golf Course	3.5 lbs/1000 sq ft
Sod Farms	4.0 lbs/1000 sq ft
Recreational Lands	0.2 lbs/1000 sq ft

A commercial landscaping firm has been interviewed to determine trends in commercial fertilizer application. Various fertilizer formulations are used including 10-6-4, 16-4-8 and 20-10-5 (nitrogen-phosphate-potash) depending upon season. Heavier nitrogen application rates are generally used in the spring. Fertilizer used is 50 percent organic nitrogen. This is applied in a dry form approximately 2-3 times per year, and a 50 pound bag is applied over approximately 16,000 square feet. Based on this rate if 20- 10-5 nitrogen were applied in the spring, and 16-4-8 were applied during summer and fall, this would result in an application rate of 1.5-2.1 pounds per 1000 square feet. The high of this range is a conservative value based on three applications of relatively high nitrogen fertilizer, which will be used for nitrogen in recharge simulation.

In addition, it is noted that the Nonpoint Source Management Handbook indicates that application rates as low as 1.0 lb/1000 sq ft can be achieved with proper fertilizer management control.

6. *Fertilizer Nitrogen Leaching Rate 1* - Nitrogen applied as fertilizer is subject to plant uptake (20 to 80%; 50% on average) and storage in thatch and soils (36 to 47%), thereby reducing the total amount of nitrogen leached. The percentage of plant uptake and storage are based on studies cited in the LIRPB's Special Groundwater Protection Area Plan. Based on those studies, a conservative nitrogen leaching rate of 14% has been applied in the model.

7. *Area of Land Fertilized 2* - More than one fertilizer nitrogen input is provided in order allow consideration of mixed use and/or golf course projects where land is fertilized at different rates.

8. *Fertilizer Application Rate 2* - Fertilizer Application Rates for this entry can be determined based upon Data Cell 5 above.

9. *Fertilizer Nitrogen Leaching Rate 2* - Fertilizer Nitrogen Leaching Rates can be determined based upon Data Cell 6 above.

10. *Pet Waste Application Rate* - Pet Waste Nitrogen results from the excretion of domestic pets in the outside environment. There is relatively little definitive information concerning this nitrogen source; however, several references were located and are analyzed herein. The 208 Study provides a table of nitrogen concentration in manure for various animals, not including dogs or cats. Total nitrogen values in the range of 0.30-0.43 lbs/day/1000 lbs live weight are reported for cattle, sheep and horses **(Koppelman, 1978; Animal Waste report p. 3).** It is assumed that dogs constitute the major source of animal waste which would be present in the yards of residential developments. Cat waste would be significantly less due to the lesser live weight of cats and the fact that many cat owners dispose of cat waste in solid waste by using an indoor litter box. If an average of 0.35 lbs of nitrogen is assumed for dogs, and an average of 25 pounds live weight is assumed per dog, then the total annual nitrogen per pet would be 3.19 lbs/year. The only other reference located which approximates nitrogen in pet waste is Land Use and Ground-Water Quality in the Pine Barrens of Southampton **(Hughes and Porter, 1983; p. 10).** This reference assumed an application rate of 6.5 lbs/acre of nitrogen. Pet waste was assumed to be deposited evenly over all turf. This assumption was not correlated to population density or pet density, but only to turfed acreage. In comparison of the two values, the per pet value corresponds to approximately 2 turfed acres. For the purpose of this model, the value of 3.19 lbs/pet/year is considered to be the most justifiable value for pet waste and is entered in this Data Cell.

11. *Pet Waste Nitrogen Leaching Rate* - Pet waste is also subject to a leaching rate factor whereby, 50 percent of the nitrogen applied to the ground is removed as a gas.

12. *Area of Land Irrigated* - No entry need be made in this Data Cell. This value is the same as Data Cell 27 of the Site Recharge Parameters and SONIR will transfer the data entry to this Cell.

13. *Irrigation Rate* - No entry need be made in this Data Cell. This value is the same as Data Cell 29 of the Site Recharge Parameters and SONIR will transfer the data entry to this Cell.

14. *Irrigation Nitrogen Leaching Rate* - Hughes and Porter **(1983; p. 10)** indicate that "plant uptake and gaseous losses are assumed to remove 85% of the nitrogen entering in precipitation". Irrigation nitrogen would be expected to be subject to the same losses, therefore, a leaching rate of 15% is entered in this Data Cell.

15 *Nitrogen in Precipitation* - Groundwater nitrogen is partially derived from rainwater. Nitrate-nitrogen concentrations in precipitation have been reported to be on the order of 1-2 mg/l in Nassau and Suffolk Counties **(SCDHS, 1987; p. 6-4).**

16. *Precipitation Nitrogen Leaching Rate* - As indicated above, a nitrogen leaching rate of 15% is applied to precipitation nitrogen.

17. *Nitrogen in Water Supply* - The concentration of Nitrogen in Water Supply determines the quantity of nitrogen which enters the site as a result of irrigation nitrogen and wastewater flow. Local water supply data should be utilized if available, otherwise a value of between 1 and 2 mg/l could be utilized.

18. *Nitrogen in Commercial/STP Flow* - This data entry allows SONIR to compute the quantity of nitrogen resulting from commercial discharge, denitrification systems and/or sewage treatment plants. Total nitrogen in community wastewater is identified as having a total nitrogen concentration of 20 mg/l in weak effluent; 40 mg/l in medium strength effluent, and 85 mg/l in strong effluent **(Metcalf & Eddy, Inc, 1991).** It is recommended that a value of 40 mg/l be used for total nitrogen concentration in commercial sanitary systems. Properly functioning denitrification systems and sewage treatment plants are capable of reducing total nitrogen to less than 10 mg/l in accordance with discharge limitations. A value of 10 mg/l can be entered in this data cell for such systems. The SONIR model computes the number of pounds of nitrogen in sanitary discharge as a function of concentration. The absolute nitrogen is utilized in the model; however, it must recognized that from the discharge point, nitrogen is nitrified through conversion of ammonia to nitrate in the leaching area beneath the discharge point. Further natural transformation in the form of denitrification occurs as a result of bacteria. This causes release of nitrogen gas and may account for further reduction of 50 percent or more subsequent to discharge **(Canter and Knox, 1979; pp. 77-78; Hughes and Porter, 1983; p. 14).** As a result SONIR is conservative in predicting the concentration of nitrogen in recharge, and when natural denitrification of sanitary effluent is considered, actual concentration would be less.

Site Nitrogen Budget - Sheet 2

Once data entry is complete for Nitrogen Budget Parameters, SONIR will complete a series of detailed computations to determine the individual component of nitrogen from each source and the total nitrogen for the overall site and use. The following describes the computations which are performed by the model:

A. *Sanitary Nitrogen - Residential* - SONIR establishes the site population using the number of units on the site, and the demographic multiplier. The nitrogen load factor is then applied and reduced by the leaching rate, resulting in the total residential nitrogen component. If the project is for a commercial use or utilizes a denitrification system, the number of dwellings should not be entered in the Data Entry Field, in which case the total nitrogen from this source will be zero (0).

B. *Pet Waste Nitrogen* - The pet waste nitrogen was determined on a per pet basis; however, the number of pets for a given residential project must be determined. In

order to correlate the number of pets to human population, a ratio was determined using information contained in the 208 Study, wherein it was estimated that there is 1 dog per 5 residents in suburban areas and 1 dog per 7 residents in urban areas **(Koppelman, 1978; Animal Waste Report, pp. 6).** This results in an average number of dogs based upon of 17 percent of the human population. Accordingly, this multiplier is used based upon the population of a land use project in order to estimate the nitrogen waste from pets. The pet waste nitrogen is subject to reduction as a function of the leaching rate, leading to the total pet waste nitrogen in pounds.

C. *Sanitary Nitrogen (Commercial/STP)* - SONIR utilizes the Commercial/STP Flow which is converted to liters and multiplied by the nitrogen concentration in waste. This provides a weight of nitrogen in milligrams which is converted to pounds for the total nitrogen from this component.

D. *Water Supply Nitrogen* - SONIR utilizes the residential wastewater design flow to compute the weight of nitrogen contributed from the water supply. The method of calculation is the same as Sanitary Nitrogen (Commercial/STP). For commercial projects, this value is accounted for in the Commercial/STP Flow.

E. *Fertilizer Nitrogen 1* - This calculation utilizes data entry from the Area of Land Fertilized 1, in the Data Input Field, to determine the weight of fertilizer nitrogen applied to the area. The area is multiplied by the application rate and reduced by the leaching rate documented previously to arrive at total weight.

F. *Fertilizer Nitrogen 2* - If fertilization rates vary, the Area of Land Fertilized 2, is utilized to determine nitrogen from this source.

G. *Precipitation Nitrogen* - Nitrogen in precipitation is considered by determining the liters of Natural Recharge entering the site, multiplied by the concentration of nitrogen in precipitation. SONIR uses the sum of natural recharge components from the Site Recharge Computations to establish the natural recharge. A precipitation nitrogen leaching rate of 15% is utilized as referenced above.

H. *Irrigation Nitrogen* - Although a very small component, the Irrigation Nitrogen is determined using the Irrigation Recharge R(irr) computed in the Site Recharge Computations, over the irrigated area of the site to produce a volume of irrigation recharge. The Irrigation Recharge value is used in order to account for reduction of recharge due to evapotranspiration, since this component is only intended to determine nitrogen leaching into soil as a result of irrigation nitrogen in the water supply. This value is converted to liters and multiplied by the concentration of nitrogen in irrigation water supply. The Irrigation Nitrogen Leaching Rate (expected to the same as for precipitation), is applied to the weight to determine the total nitrogen from this source.

Once the eight (8) series of Site Nitrogen Budget computations are complete, SONIR totals each individual component to determine the Total Site Nitrogen. This value is used in determining the weight per volume ratio of nitrogen in recharge as computed in Sheet 4 of the SONIR model.

FINAL COMPUTATIONS AND SUMMARY

SONIR utilizes data generated in Sheets 2 and 3 of the model to compute a mass/volume ratio for nitrogen in recharge. Nitrogen in recharge is converted from pounds to milligrams in order to provide units compatible for mass/volume concentration. Likewise, the quantity of site recharge is applied over the site in order to determine an overall volume number for site recharge. This is then converted to liters. The final computation divides the total weight of nitrogen in milligrams, by the total volume of recharge in liters, to arrive at the Nitrogen in Recharge ratio in milligrams per liter (mg/l). This concentration represents the Final Concentration of Nitrogen in Recharge which is highlighted on Sheet 4.

Sheet 4 also provides a site recharge summary in order to compare recharge between natural conditions, a proposed project and/or alternatives. Total Site Recharge is presented in both inches, and as a volume in cubic feet/year, gallons/year and million gallons/year (MGY).

The final field summarizes the Conversions Used in SONIR. Conversions are standard conversion multipliers as found in standard engineering references.

SONIR is a valuable tool allowing for versatile determination of site recharge as determined from many components of site recharge. SONIR determines the weight of nitrogen applied to a site from a variety of sources as well. SONIR is a fully referenced model utilizing basic hydrologic and engineering principals, in a simulation of nitrogen in recharge. Input data should be carefully justified in order to achieve best results. SONIR can be used effectively in comparing land use alternatives and relative impact upon groundwater due to nitrogen. By running the model for Existing Conditions, Proposed Project conditions and/or alternative land uses comparison of impacts can be made for consideration in land use decision-making. Questions, comments or suggestions concerning this model should be addressed to Nelson, Pope & Voorhis, LLC, 572 Walt Whitman Road, Melville, New York 11747.

SIMULATION OF NITROGEN IN RECHARGE (SONIR)

NELSON, POPE & VOORHIS, LLC MICROCOMPUTER MODEL

REFERENCES

Bowen, Robert, 1986, Groundwater, Second Edition, Elsevier Applied Science Publishers, London and New York.

Burchell, Robert W. and David L. Listokin, William R. Dolphin, 1986, The New Practitioner's Guide to Fiscal Imapact Analysis, Rutgers, The State University of New Jersey.

Canter, Larry W. and Robert C. Knox, 1985, Septic Tank System Effects on Ground Water Quality, Lewis Publishers, Inc. Chelsea, Michigan.

Cohen, Philip, O. L. Franke, and B. L. Foxworthy, 1968, An Atlas of Long Island Water Resources, New York Water Resources Commission Bulletin 62, USGS in cooperation with the New York State Water Resources Commission, Published by the State of New York.

Franke, O.L. and P. Cohen, 1972, Regional Rates of Groundwater Movement on Long Island, New York, United States Geological Survey Professional Paper 800-C, U.4S. Government Printing Office, Washington, D.C.

Freeze, Allan R.; Cherry, John A., 1979, Groundwater, Englewood Cliffs, New Jersey: Prentice-Hall, Inc.

Hughes, Henry B.F.; Pike, James; Porter, Keith S., April 1984, Assessment of Ground-Water Contamination by Nitrogen and Synthetic Organics in Two Water Districts in Nassau County, N.Y., Cornell University, Water Resources Program Center for Environmental Research, Ithaca, New York.

Hughes, Henry B.F.; and Porter, K., 1983, Land Use and Groundwater Quality in the Pine Barrens of Southampton, Cornell University, Water Resources Program, Center for Environmental Research, Ithaca, New York.

Hughes, Henry B.F.; Pacenka, Steve; Snowdon, Elizabeth, 1985, Thornthwaite and Mather's Climatic Water Bidget Method: An Implementation using the Lotus 1-2-3 (TM) Spreadsheet Program, Draft Software Model, April 1985, Cornell University, Center for Environmental Research, Ithaca, New York.

Koppelman, Lee., 1978, 208 Areawide Waste Treatment Management Handbook, Hauppuage, New York: Nassau-Suffolk Regional Planning Board.

Koszalka, E.J., 1983, Geohydrology of the Northern Part of the Town of Brookhaven, Suffolk County, New York: U.S. Geologic Survey Water-Resources Investigations Report 83-4042.

Long Island Business News, 1991, 1991 Long Island Almanac,Twenty Forth Edition, Ronkonkoma, New York.

Long Island Lighting Company (LILCO), June 1991, Population Survey 1991 - Current Population Estimates for Nassau and Suffolk Counties, Hicksville, New York: LILCO.

Long Island Regional Planning Board (LIRPB), 1983, Non Point Source Management Handbook, Hauppauge, New York: LIRPB.

Mather, John R., 1979, The Influence of Land-Use Change on Water Resources, Newark, Delaware: Water Resources Center, University of Delaware.

Metcalf & Eddy, Inc., 1991, Wastewater Engineering, Treatment, Disposal and Reuse, Third Edition, McGraw-Hill, Inc., New York.

McClymonds, N.E. and Franke, O.L., 1972, Water Transmitting Properties of Aquifers on Long Island, Washington, D.C.: U.S. Geological Survey, Professional Paper 627-E., U.S. Government Printing Office.

NYSDEC, Undated, Water Quality Regulations - Surface Water and Groundwater Classifications and Standards, New York State Codes, Rules and Regulations, Title 6, Chapter X, Parts 700-705, Section 703.5 Classes and Quality Standards for Groundwater, NYSDEC, Albany, New York.

Peterson, David S., 1987, Ground-water-recharge Rates in Nassau and Suffolk Counties, New York, Syosset, New York: U.S. Geological Survey, WRI Report 86-4181.

Reynolds, Royal; Robert Forgione and Keith Porter, 1983, Pilot Plant Study Nitrogen Removal in a Modified Residential Subsurface Sewage Disposal System Phase 2 - Additional Investigations, William F. Cosulich Associates, P.C., Woodbury, New York and Suffolk County Department of Health Services, Hauppauge, New York.

Snowden, Elizabeth; and Steven Pacenka, 1985, Thornthwaite and Mather's Climatic Water Bidget Method: An Implementation using the Lotus 1-2-3 (TM) Spreadsheet Program, Draft Software Manual, April 1985, Cornell University, Center for Environmental Research, Ithaca, New York.

SCDHS, 1984, Standards for Subsurface Sewage Disposal Systems for Other Than Single-Family Residences, Revised March 5, 1984, Established pursuant to Article VB, Section 2c of the Suffolk County Sanitary Code, Division of Environmental Quality, Hauppauge, New York.

SCDHS, 1987, Suffolk County Comprehensive Water Resources Management Plan Volume 1, Hauppauge, New York.

Warner, J.W., W.E. Hanna, R.J. Landry, J.P. Wulforst, J.A. Neeley, R.L. Holmes, C.E. Rice., 1975, Soil Survey of Suffolk County, New York, Washington, D.C.: U.S. Department of Agriculture, Soil Conservation Service, in cooperation with Cornell Agriculture Experiment Station, U.S. Government Printing Office.

Warren, M.A., DeLaguna, Wallace, and Lusczynski, N.J., 1968. Hydrology of Brookhaven National Laboratory and Vicinity, Suffolk County, New York: U.S. Geological Survey Bulletin 1156-Cm 127 p., 41 figs., 10 pl.

SIMULATION OF NITROGEN IN RECHARGE (SONIR)

NELSON, POPE & VOORHIS, LLC MICROCOMPUTER MODEL

NAME OF PROJECT **Forge Road Trailer Park**

DATA INPUT FIELD **Existing Conditions** **SHEET 1**

A	*Site Recharge Parameters*	*Value*	*Units*
1	Area of Site	7.32	acres
2	Precipitation Rate	42.82	inches
3	Acreage of Lawn	0.44	acres
4	Fraction of Land in Lawn	0.060	fraction
5	Evapotranspiration from Lawn	24.20	inches
6	Runoff from Lawn	0.30	inches
7	Acreage of Impervious	1.65	acres
8	Fraction of Land Impervious	0.225	fraction
9	Evaporation from Impervious	4.28	inches
10	Runoff from Impervious	0.00	inches
11	Acreage of Unvegetated	0.00	acres
12	Fraction of Land Unvegetated	0.000	fraction
13	Evapotrans. from Unvegetated	24.20	inches
14	Runoff from Unvegetated	0.30	inches
15	Acreage of Water	0.00	acres
16	Fraction of Site in Water	0.000	fraction
17	Evaporation from Water	30.00	inches
18	Makeup Water (if applicable)	0.00	inches
19	Acreage of Natural Area	1.54	acres
20	Fraction of Land Natural	0.210	fraction
21	Evapotrans. from Natural Area	24.20	inches
22	Runoff from Natural Area	0.30	inches
23	Acreage of Other Area	0.00	acres
24	Fraction of Land Other Area	0.000	fraction
25	Evapotrans. from Other Area	0.00	inches
26	Runoff from Other Area	0.30	inches
27	Acreage of Land Irrigated	0.45	acres
28	Fraction of Land Irrigated	0.061	fraction
29	Irrigation Rate	5.50	inches
30	Number of Dwellings	32	units
31	Water Use per Dwelling	225	gal/day
32	Wastewater Design Flow	7,200	gal/day
33	Commercial /STP Design Flow	0	gal/day

B	*Nitrogen Budget Parameters*	*Value*	*Units*
1	Persons per Dwelling	0.00	persons
2	Nitrogen per Person per Year	10.0	lbs
3	a. Sanitary Nitrogen Leaching Rate	75%	percent
3	b. Sanitary Nitrogen Leaching Rate	50%	percent
4	Area of Land Fertilized 1	4.65	acres
5	Fertilizer Application Rate 1	2.30	lbs/1000 sq ft
6	Fertilizer Nitrogen Leaching Rate 1	14%	percent
7	Area of Land Fertilized 2	0.00	acres
8	Fertilizer Application Rate 2	0.00	lbs/1000 sq ft
9	Fertilizer Nitrogen Leaching Rate 2	0%	percent
10	Pet Waste Application Rate	3.19	lbs/pet
11	Pet Waste Nitrogen Leaching Rate	50%	percent
12	Area of Land Irrigated	4.65	acres
13	Irrigation Rate	5.50	inches
14	Irrigation Nitrogen Leaching Rate	15%	percent
15	Nitrogen in Precipitation	1.00	mg/l
16	Precipitation Nitrogen Leaching Rate	15%	percent
17	Nitrogen in Water Supply	1.00	mg/l
18	Nitrogen in Commercial/STP Flow	50.00	mg/l

C	*Comments*
1)	Please refer to user manual for data input instructions.
2)	Sanitary Nitrogen Leaching Rate 3.a.) is for residential wastewater and 3.b.) is for commercial or STP which varies from 50 percent for conventional systems to 10 percent for STP effluent discharge.

SIMULATION OF NITROGEN IN RECHARGE (SONIR)

NELSON, POPE & VOORHIS, LLC MICROCOMPUTER MODEL

SITE RECHARGE COMPUTATIONS **Existing Conditions** **SHEET 2**

A	*Lawn Area Recharge*	*Value*	*Units*
1	A = Fraction of Land in Lawn	0.060	fraction
2	P = Precipitation Rate	42.82	inches
3	E = Evapotranspiration Rate	24.20	inches
4	Q = Runoff Rate	0.30	inches
5	R(l) = P - (E + Q)	18.32	inches
6	R(L) = R(l) x A	1.10	inches

B	*Impervious Area Recharge*	*Value*	*Units*
1	A = Fraction of Land in Impervious	0.225	fraction
2	P = Precipitation Rate	42.82	inches
3	E = Evapotranspiration Rate	4.28	inches
4	Q = Runoff Rate	0.00	inches
5	R(i) = P - (E + Q)	38.54	inches
6	R(I) = R(i) x A	8.69	inches

C	*Unvegetated Area Recharge*		
1	A = Fraction of Land Unveg.	0.000	fraction
2	P = Precipitation Rate	42.82	inches
3	E = Evapotranspiration Rate	0.30	inches
4	Q = Runoff Rate	0.00	inches
5	R(u) = P - (E + Q)	42.52	inches
6	R(U) = R(u) x A	0.00	inches

D	*Water Area Loss*		
1	A = Fraction of Site in Water	0.000	fraction
2	P = Precipitation Rate	42.82	inches
3	E = Evaporation Rate	30.00	inches
4	Q = Runoff Rate	0.00	inches
5	M = Makeup Water	0.00	inches
6	R(w) = {P - (E+Q)} - M	12.82	inches
7	R(W) = R(w) x A	0.00	inches

E	*Natural Area Recharge*		
1	A = Fraction of Land in Natural	0.210	fraction
2	P = Precipitation Rate	42.82	inches
3	E = Evapotranspiration Rate	24.20	inches
4	Q = Runoff Rate	0.30	inches
5	R(n) = P - (E + Q)	18.32	inches
6	R(N) = R(n) x A	3.85	inches

F	*Other Area Recharge*		
1	A = Fraction of Land in Other	0.000	fraction
2	P = Precipitation Rate	42.82	inches
3	E = Evapotranspiration Rate	0.00	inches
4	Q = Runoff Rate	0.30	inches
5	R(o) = P - (E + Q)	42.52	inches
6	R(O) = R(o) x A	0.00	inches

G	*Irrigation Recharge*		
1	A = Fraction of Land Irrigated	0.061	fraction
2	I = Irrigation Rate	5.50	inches
3	E = Evaptranspiration Rate	3.11	inches
4	Q = Runoff Rate	0.30	inches
5	R(irr) = I - (E + Q)	2.09	inches
6	R(IRR) = R(irr) x A	0.13	inches

H	*Wastewater Recharge*		
1	WDF = Wastewater Design Flow	7,200	gal/day
2	WDF = Wastewater Design Flow	351,364	cu ft/yr
3	A = Area of Site	318,859	sq ft
4	R(ww) = WDF/A	1.10	feet
5	R(WW) = Wastewater Recharge	13.22	inches

Total Site Recharge		
R(T) =	R(L) + R(I) + R(U) + R(W) + R(N) + R(O) + R(IRR) + R(WW)	
R(T) =	**26.99**	**inches**

SIMULATION OF NITROGEN IN RECHARGE (SONIR)

NELSON, POPE & VOORHIS, LLC MICROCOMPUTER MODEL

SITE NITROGEN BUDGET — **Existing Conditions** — **SHEET 3**

A	*Sanitary Nitrogen-Residential*	*Value*	*Units*
1	Number of Dwellings	32	units
2	Persons per Dwelling	0.00	capita
3	P = Population	0.00	capita
4	N = Nitrogen per person	10	lbs
5	LR = Leaching Rate	75%	percent
6	N(S) = P x N x LR	0.00	lbs
7	N(S) = Sanitary Nitrogen	0.00	lbs

B	*Pet Waste Nitrogen*	*Value*	*Units*
1	AR = Application Rate	3.19	lbs/pet
2	Human Population	0	capita
3	Pets = 17 percent of capita	0	pets
4	N(p) = AR x pets	0.00	lbs
5	LR = Leaching Rate	50%	percent
6	N(P) = N(p) x LR	0.00	lbs
7	N(P) = Pet Waste Nitrogen	0.00	lbs

C	*Sanitary Nitrogen (Commercial/STP)*		
1	CF = Commercial/STP Flow	7,200	gal/day
2	CF = Commercial/STP Flow	9,946,980	liters/yr
3	N = Nitrogen in Commercial	50.00	mg/l
4	LR = Leaching Rate	75%	percent
5	N(S) = CF x N x LR	373,011,750	milligrams
6	N(S) = Sanitary Nitrogen	822.49	lbs

D	*Water Supply Nitrogen* *(other than wastewater, if applicable)*		
1	WDF = Wastewater Design Flow	7,200	gal/day
2	WDF = Wastewater Design Flow	9,946,980	liters/yr
3	N = Nitrogen in Water Supply	1.00	mg/l
4	N(WW) = WDF x N	9,946,980	milligrams
5	N(WW) = Wastewater Nitrogen	21.93	lbs

E	*Fertilizer Nitrogen 1*		
1	A = Area of Land Fertilized 1	202,554	sq ft
2	AR = Application Rate	2.30	lbs/1000 sf
3	LR = Leaching Rate	14%	percent
4	N(F1) = A x AR x LR	65.22	lbs
5	N(F1) = Fertilizer Nitrogen	65.22	lbs

F	*Fertilizer Nitrogen 2*		
1	A = Area of Land Fertilized 2	0	sq ft
2	AR = Application Rate	0.00	lbs/1000 sf
3	LR = Leaching Rate	0%	percent
4	N(F2) = A x AR x LR	0.00	lbs
5	N(F2) = Fertilizer Nitrogen	0.00	lbs

G	*Precipitation Nitrogen*		
1	R(n) = Natural Recharge (feet)	1.14	feet
2	A = Area of Site (sq ft)	318,859	sq ft
3	R(N) = R(n) x A	362,510	cu ft
4	R(N) = Natural Recharge (liters)	10,266,294	liters
5	N = Nitrogen in Precipitation	1.00	mg/l
6	LR = Leaching Rate	15%	percent
7	N(ppt) = R(N) x N x LR	102,663	milligrams
8	N(ppt) = Precipitation Nitrogen	0.23	lbs

H	*Irrigation Nitrogen*		
1	R = Irrigation Recharge (inches)	2.09	inches
2	R = Irrigation Rate (feet)	0.17	feet
3	A = Area of Land Irrigated	202,554	sq ft
4	R(I) = R(irr) x A	35,310	cu ft
5	R(I) = Site Precipitation (liters)	999,985	liters
6	N = Nitrogen in Water Supply	1.00	mg/l
7	LR = Leaching Rate	15%	percent
8	N(irr) = R(I) x N x LR	149,998	milligrams
9	N(irr) = Irrigation Nitrogen	0.33	lbs

Total Site Nitrogen	
N=	N(S) + N(P) + N(WW) + N(F1) + N(F2) + N(ppt) + N(irr)
N=	**910.20** lbs

SIMULATION OF NITROGEN IN RECHARGE (SONIR)

NELSON, POPE & VOORHIS, LLC MICROCOMPUTER MODEL

NAME OF PROJECT **Forge Road Trailer Park**

DATA INPUT FIELD **Existing Conditions** **SHEET 1**

A	*Site Recharge Parameters*	*Value*	*Units*
1	Area of Site	7.32	acres
2	Precipitation Rate	42.82	inches
3	Acreage of Lawn	0.44	acres
4	Fraction of Land in Lawn	0.060	fraction
5	Evapotranspiration from Lawn	24.20	inches
6	Runoff from Lawn	0.30	inches
7	Acreage of Impervious	1.65	acres
8	Fraction of Land Impervious	0.225	fraction
9	Evaporation from Impervious	4.28	inches
10	Runoff from Impervious	0.00	inches
11	Acreage of Unvegetated	0.00	acres
12	Fraction of Land Unvegetated	0.000	fraction
13	Evapotrans. from Unvegetated	24.20	inches
14	Runoff from Unvegetated	0.30	inches
15	Acreage of Water	0.00	acres
16	Fraction of Site in Water	0.000	fraction
17	Evaporation from Water	30.00	inches
18	Makeup Water (if applicable)	0.00	inches
19	Acreage of Natural Area	1.54	acres
20	Fraction of Land Natural	0.210	fraction
21	Evapotrans. from Natural Area	24.20	inches
22	Runoff from Natural Area	0.30	inches
23	Acreage of Other Area	0.00	acres
24	Fraction of Land Other Area	0.000	fraction
25	Evapotrans. from Other Area	0.00	inches
26	Runoff from Other Area	0.30	inches
27	Acreage of Land Irrigated	0.45	acres
28	Fraction of Land Irrigated	0.061	fraction
29	Irrigation Rate	5.50	inches
30	Number of Dwellings	32	units
31	Water Use per Dwelling	225	gal/day
32	Wastewater Design Flow	7,200	gal/day
33	Commercial /STP Design Flow	0	gal/day

B	*Nitrogen Budget Parameters*	*Value*	*Units*
1	Persons per Dwelling	0.00	persons
2	Nitrogen per Person per Year	10.0	lbs
3	a. Sanitary Nitrogen Leaching Rate	90%	percent
3	b. Sanitary Nitrogen Leaching Rate	50%	percent
4	Area of Land Fertilized 1	4.65	acres
5	Fertilizer Application Rate 1	2.30	lbs/1000 sq ft
6	Fertilizer Nitrogen Leaching Rate 1	14%	percent
7	Area of Land Fertilized 2	0.00	acres
8	Fertilizer Application Rate 2	0.00	lbs/1000 sq ft
9	Fertilizer Nitrogen Leaching Rate 2	0%	percent
10	Pet Waste Application Rate	3.19	lbs/pet
11	Pet Waste Nitrogen Leaching Rate	50%	percent
12	Area of Land Irrigated	4.65	acres
13	Irrigation Rate	5.50	inches
14	Irrigation Nitrogen Leaching Rate	15%	percent
15	Nitrogen in Precipitation	1.00	mg/l
16	Precipitation Nitrogen Leaching Rate	15%	percent
17	Nitrogen in Water Supply	1.00	mg/l
18	Nitrogen in Commercial/STP Flow	10.00	mg/l

C	*Comments*
1)	Please refer to user manual for data input instructions.
2)	Sanitary Nitrogen Leaching Rate 3.a.) is for residential wastewater and 3.b.) is for commercial or STP which varies from 50 percent for conventional systems to 10 percent for STP effluent discharge.

SIMULATION OF NITROGEN IN RECHARGE (SONIR)

NELSON, POPE & VOORHIS, LLC MICROCOMPUTER MODEL

SITE RECHARGE COMPUTATIONS | **Existing Conditions** | **SHEET 2**

A	*Lawn Area Recharge*	*Value*	*Units*
1	A = Fraction of Land in Lawn	0.060	fraction
2	P = Precipitation Rate	42.82	inches
3	E = Evapotranspiration Rate	24.20	inches
4	Q = Runoff Rate	0.30	inches
5	R(l) = P - (E + Q)	18.32	inches
6	R(L) = R(l) x A	1.10	inches

B	*Impervious Area Recharge*	*Value*	*Units*
1	A = Fraction of Land in Impervious	0.225	fraction
2	P = Precipitation Rate	42.82	inches
3	E = Evapotranspiration Rate	4.28	inches
4	Q = Runoff Rate	0.00	inches
5	R(i) = P - (E + Q)	38.54	inches
6	R(I) = R(i) x A	8.69	inches

C	*Unvegetated Area Recharge*		
1	A = Fraction of Land Unveg.	0.000	fraction
2	P = Precipitation Rate	42.82	inches
3	E = Evapotranspiration Rate	0.30	inches
4	Q = Runoff Rate	0.00	inches
5	R(u) = P - (E + Q)	42.52	inches
6	R(U) = R(u) x A	0.00	inches

D	*Water Area Loss*		
1	A = Fraction of Site in Water	0.000	fraction
2	P = Precipitation Rate	42.82	inches
3	E = Evaporation Rate	30.00	inches
4	Q = Runoff Rate	0.00	inches
5	M = Makeup Water	0.00	inches
6	R(w) = {P - (E+Q)} - M	12.82	inches
7	R(W) = R(w) x A	0.00	inches

E	*Natural Area Recharge*		
1	A = Fraction of Land in Natural	0.210	fraction
2	P = Precipitation Rate	42.82	inches
3	E = Evapotranspiration Rate	24.20	inches
4	Q = Runoff Rate	0.30	inches
5	R(n) = P - (E + Q)	18.32	inches
6	R(N) = R(n) x A	3.85	inches

F	*Other Area Recharge*		
1	A = Fraction of Land in Other	0.000	fraction
2	P = Precipitation Rate	42.82	inches
3	E = Evapotranspiration Rate	0.00	inches
4	Q = Runoff Rate	0.30	inches
5	R(o) = P - (E + Q)	42.52	inches
6	R(O) = R(o) x A	0.00	inches

G	*Irrigation Recharge*		
1	A = Fraction of Land Irrigated	0.061	fraction
2	I = Irrigation Rate	5.50	inches
3	E = Evaptranspiration Rate	3.11	inches
4	Q = Runoff Rate	0.30	inches
5	R(irr) = I - (E + Q)	2.09	inches
6	R(IRR) = R(irr) x A	0.13	inches

H	*Wastewater Recharge*		
1	WDF = Wastewater Design Flow	7,200	gal/day
2	WDF = Wastewater Design Flow	351,364	cu ft/yr
3	A = Area of Site	318,859	sq ft
4	R(ww) = WDF/A	1.10	feet
5	R(WW) = Wastewater Recharge	13.22	inches

Total Site Recharge		
R(T) =	R(L) + R(I) + R(U) + R(W) + R(N) + R(O) + R(IRR) + R(WW)	
R(T) =	**26.99**	**inches**

SIMULATION OF NITROGEN IN RECHARGE (SONIR)

NELSON, POPE & VOORHIS, LLC MICROCOMPUTER MODEL

SITE NITROGEN BUDGET — **Existing Conditions** — **SHEET 3**

A	*Sanitary Nitrogen-Residential*	*Value*	*Units*
1	Number of Dwellings	32	units
2	Persons per Dwelling	0.00	capita
3	P = Population	0.00	capita
4	N = Nitrogen per person	10	lbs
5	LR = Leaching Rate	90%	percent
6	N(S) = P x N x LR	0.00	lbs
7	N(S) = Sanitary Nitrogen	0.00	lbs

B	*Pet Waste Nitrogen*	*Value*	*Units*
1	AR = Application Rate	3.19	lbs/pet
2	Human Population	0	capita
3	Pets = 17 percent of capita	0	pets
4	N(p) = AR x pets	0.00	lbs
5	LR = Leaching Rate	50%	percent
6	N(P) = N(p) x LR	0.00	lbs
7	N(P) = Pet Waste Nitrogen	0.00	lbs

C	*Sanitary Nitrogen (Commercial/STP)*		
1	CF = Commercial/STP Flow	7,200	gal/day
2	CF = Commercial/STP Flow	9,946,980	liters/yr
3	N = Nitrogen in Commercial	10.00	mg/l
4	LR = Leaching Rate	90%	percent
5	N(S) = CF x N x LR	89,522,820	milligrams
6	N(S) = Sanitary Nitrogen	197.40	lbs

D	*Water Supply Nitrogen* *(other than wastewater, if applicable)*		
1	WDF = Wastewater Design Flow	7,200	gal/day
2	WDF = Wastewater Design Flow	9,946,980	liters/yr
3	N = Nitrogen in Water Supply	1.00	mg/l
4	N(WW) = WDF x N	9,946,980	milligrams
5	N(WW) = Wastewater Nitrogen	21.93	lbs

E	*Fertilizer Nitrogen 1*		
1	A = Area of Land Fertilized 1	202,554	sq ft
2	AR = Application Rate	2.30	lbs/1000 sf
3	LR = Leaching Rate	14%	percent
4	N(F1) = A x AR x LR	65.22	lbs
5	N(F1) = Fertilizer Nitrogen	65.22	lbs

F	*Fertilizer Nitrogen 2*		
1	A = Area of Land Fertilized 2	0	sq ft
2	AR = Application Rate	0.00	lbs/1000 sf
3	LR = Leaching Rate	0%	percent
4	N(F2) = A x AR x LR	0.00	lbs
5	N(F2) = Fertilizer Nitrogen	0.00	lbs

G	*Precipitation Nitrogen*		
1	R(n) = Natural Recharge (feet)	1.14	feet
2	A = Area of Site (sq ft)	318,859	sq ft
3	R(N) = R(n) x A	362,510	cu ft
4	R(N) = Natural Recharge (liters)	10,266,294	liters
5	N = Nitrogen in Precipitation	1.00	mg/l
6	LR = Leaching Rate	15%	percent
7	N(ppt) = R(N) x N x LR	102,663	milligrams
8	N(ppt) = Precipitation Nitrogen	0.23	lbs

H	*Irrigation Nitrogen*		
1	R = Irrigation Recharge (inches)	2.09	inches
2	R = Irrigation Rate (feet)	0.17	feet
3	A = Area of Land Irrigated	202,554	sq ft
4	R(I) = R(irr) x A	35,310	cu ft
5	R(I) = Site Precipitation (liters)	999,985	liters
6	N = Nitrogen in Water Supply	1.00	mg/l
7	LR = Leaching Rate	15%	percent
8	N(irr) = R(I) x N x LR	149,998	milligrams
9	N(irr) = Irrigation Nitrogen	0.33	lbs

Total Site Nitrogen		
N=	N(S) + N(P) + N(WW) + N(F1) + N(F2) + N(ppt) + N(irr)	
N=	**285.11**	lbs

APPENDIX G

Natural Heritage Program Response

NEW YORK STATE DEPARTMENT OF ENVIRONMENTAL CONSERVATION
Division of Fish, Wildlife & Marine Resources
New York Natural Heritage Program
625 Broadway, 5th Floor, Albany, New York 12233-4757
Phone: (518) 402-8935 • **Fax:** (518) 402-8925
Website: www.dec.ny.gov

Joe Martens
Commissioner

August 30, 2013

Lara Pomi-Urbat
Nelson, Pope & Voorhis
572 Walt Whitman Road
Melville, NY 11747

Re: Riverhead Brownfield Opportunity Study Area (NP&V #12207)
Town/City: Riverhead. County: Suffolk.

Dear Lara Pomi-Urbat :

In response to your recent request, we have reviewed the New York Natural Heritage Program database with respect to the above project

Enclosed is a report of rare or state-listed animals and plants, and significant natural communities, which our databases indicate occur, or may occur, on your site or in the immediate vicinity of your site.

For most sites, comprehensive field surveys have not been conducted; the enclosed report only includes records from our databases. We cannot provide a definitive statement as to the presence or absence of all rare or state-listed species or significant natural communities. This information should not be substituted for on-site surveys that may be required for environmental impact assessment.

Our databases are continually growing as records are added and updated. If this proposed project is still under development one year from now, we recommend that you contact us again so that we may update this response with the most current information.

The presence of the plants and animals identified in the enclosed report may result in this project requiring additional review or permit conditions. For further guidance, and for information regarding other permits that may be required under state law for regulated areas or activities (e.g., regulated wetlands), please contact the appropriate NYS DEC Regional Office, Division of Environmental Permits, as listed at www.dec.ny.gov/about/39381.html.

Sincerely,

Andrea Chaloux

Andrea Chaloux
Environmental Review Specialist
New York Natural Heritage Program

776

The following state-listed animals have been documented at your project site, or in its vicinity.

The following list includes animals that are listed by NYS as Endangered, Threatened, or Special Concern; and/or that are federally listed or are candidates for federal listing. The list may also include significant natural communities that can serve as habitat for Endangered or Threatened animals, and/or other rare animals and rare plants found at these habitats.

For information about potential impacts of your project on these populations, how to avoid, minimize, or mitigate any impacts, and any permit considerations, contact the Wildlife Manager or the Fisheries Manager at the NYSDEC Regional Office for the region where the project is located. A listing of Regional Offices is at http://www.dec.ny.gov/about/558.html.

The following species and habitats have been documented at or near the project site, generally within 0.5 mile. Potential onsite and offsite impacts from the project may need to be addressed.

COMMON NAME	*SCIENTIFIC NAME*	*NY STATE LISTING*	*FEDERAL LISTING*	
Amphibians				
Tiger Salamander	*Ambystoma tigrinum*	Endangered		1147
Fish				
Banded Sunfish	*Enneacanthus obesus*	Threatened		11545
Butterflies				
Hessel's Hairstreak	*Callophrys hesseli*	Endangered		4346

This report only includes records from the NY Natural Heritage databases. For most sites, comprehensive field surveys have not been conducted, and we cannot provide a definitive statement as to the presence or absence of all rare or state-listed species. This information should not be substituted for on-site surveys that may be required for environmental impact assessment.

If any rare plants or animals are documented during site visits, we request that information on the observations be provided to the New York Natural Heritage Program so that we may update our database.

Information about many of the listed animals in New York, including habitat, biology, identification, conservation, and management, are available online in Natural Heritage's Conservation Guides at www.guides.nynhp.org, and from NYSDEC at http://www.dec.ny.gov/animals/7494.html.

Information about many of the rare plants and animals, and natural community types, in New York are available online in Natural Heritage's Conservation Guides at www.guides.nynhp.org, and from NatureServe Explorer at http://www.natureserve.org/explorer.

The following rare plants, rare animals, and significant natural communities have been documented at your project site, or in its vicinity.

We recommend that potential onsite and offsite impacts of the proposed project on these species or communities be addressed as part of any environmental assessment or review conducted as part of the planning, permitting and approval process, such as reviews conducted under SEQR. Field surveys of the project site may be necessary to determine the status of a species at the site, particularly for sites that are currently undeveloped and may still contain suitable habitat. Final requirements of the project to avoid, minimize, or mitigate potential impacts are determined by the lead permitting agency or the government body approving the project.

The following animals, while not listed by New York State as Endangered or Threatened, are of conservation concern to the state, and are considered rare by the New York Natural Heritage Program.

COMMON NAME	SCIENTIFIC NAME	NY STATE LISTING	HERITAGE CONSERVATION STATUS
Moths			
Coastal Barrens Buckmoth	Hemileuca maia ssp. 5	Special Concern	Imperiled in NYS and Globally Uncommon

Manorville Hills, 1987-10-19: The moths were found in a dense tree and scrub oak thicket with scattered pitch pine. In 1987, the moth was observed on graded dirt road with little vegetation on either side. The road is flanked by a pine-oak forest. The understory consists of scrub oak and mixed ericads. 7097

The following significant natural communities are considered significant from a statewide perspective by the NY Natural Heritage Program. They are either occurrences of a community type that is rare in the state, or a high quality example of a more common community type. By meeting specific, documented criteria, the NY Natural Heritage Program considers these community occurrences to have high ecological and conservation value.

COMMON NAME	SCIENTIFIC NAME	NY STATE LISTING	HERITAGE CONSERVATION STATUS
Wetland/Aquatic Communities			
Coastal Plain Atlantic White Cedar Swamp			High Quality Occurrence of Rare Community Type

Cranberry Bog: 1420

Coastal Plain Pond Shore — High Quality Occurrence of Rare Community Type

Cranberry Bog: This is a small pond with good diversity but with development nearby. 4396

Coastal Plain Pond Shore — Rare Community Type

Kroemer Avenue Pond: Diversity is low, there are some exotics, and the area is small. 4583

Red Maple-Blackgum Swamp — High Quality Occurrence of Rare Community Type

Lower Peconic River: The forest is of moderate size, and apparently mature with tip-up mounds, in a moderately intact landscape with a large road to the south, but well connected to surrounding pine barrens. 838

Upland/Terrestrial Communities

Pitch Pine-Oak Forest — High Quality Occurrence

Manorville Hills: This is a very large area of forest, with good species composition. 8108

Pitch Pine-Oak Forest — High Quality Occurrence

Riverhead Pine Barrens: This is a large pitch pine-oak forest with some disturbance and fragmentation. The community is approximately 75% surrounded by developed land except for dwarf pine barrens to the south. The Includes pitch pine-oak-heath woodland and a few coastal plainponds and pond shores. 3424

The following plants are listed as Endangered or Threatened by New York State, and/or are considered rare by the New York Natural Heritage Program, and so are a vulnerable natural resource of conservation concern.

COMMON NAME	SCIENTIFIC NAME	NY STATE LISTING	HERITAGE CONSERVATION STATUS
Vascular Plants			
Atlantic White Cedar	Chamaecyparis thyoides	Threatened	Imperiled in NYS
Cranberry Bog, 2005-07-08: This is a wetland complex set in pine barrens-cedar swamp-fen along a river course. It is an abandoned cranberry bog dissected by a major highway. 6159			
Drowned Beakrush	Rhynchospora inundata	Threatened	Imperiled in NYS
Cranberry Bog, 2005-07-08: The plants are in a small coastal plain pond in a disturbed pine barrens that is protected by the NYS Department of Environmental Conservation. The pond is seldom visited. The plants are in mucky substrate in a dried out pond. 10164			
Atlantic White Cedar	Chamaecyparis thyoides	Threatened	Imperiled in NYS
East of Merritts Pond, 1991-11-29: The trees are in a village nature preserve. 3311			
Long-beaked Beakrush	Rhynchospora scirpoides	Rare	Vulnerable in NYS
Kroemer Avenue Pond, 1988-08-09: This is a series of small ponds set in woods. The plants are on a mucky pond shore. 4813			
Golden Dock	Rumex fueginus	Endangered	Critically Imperiled in NYS
Lake Peconic, 1984-08-28: Rotten wooden dock at edge of Lake Peconic, pond loaded with non-native Myriophyllum. 6071			
Atlantic White Cedar	Chamaecyparis thyoides	Threatened	Imperiled in NYS
Peg Lane Pond, 1995-10-18: The plants are on the upper margin of a coastal plain pond shore. It is a small shallow pond set in pine barrens with white cedar/red maple fringe. 10048			

Large Yellow-eyed-grass	Xyris smalliana	Threatened	Imperiled in NYS

Peg Lane Pond, 1985-09-21: The plants are in a small, shallow pond set in pine barrens with a white cedar and red maple fringe. 13076

Fibrous Bladderwort	Utricularia striata	Threatened	Imperiled in NYS

Pulaski Street Wetland, 2003-07-31: The plants are in ponded water and muck along a low place in the right-of-way. 11031

Northern Dwarf Huckleberry	Gaylussacia bigeloviana	Endangered	Critically Imperiled in NYS

Pulaski Street Wetland, 2003-07-31: The plants are in wet, but not saturated, areas of a powerline mixed with other shrubs. 11346

This report only includes records from the NY Natural Heritage databases. For most sites, comprehensive field surveys have not been conducted, and we cannot provide a definitive statement as to the presence or absence of all rare or state-listed species. This information should not be substituted for on-site surveys that may be required for environmental impact assessment.

If any rare plants or animals are documented during site visits, we request that information on the observations be provided to the New York Natural Heritage Program so that we may update our database.

Information about many of the rare animals and plants in New York, including habitat, biology, identification, conservation, and management, are available online in Natural Heritage's Conservation Guides at www.guides.nynhp.org, from NatureServe Explorer at http://www.natureserve.org/explorer, and from USDA's Plants Database at http://plants.usda.gov/index.html (for plants).

Information about many of the natural community types in New York, including identification, dominant and characteristic vegetation, distribution, conservation, and management, is available online in Natural Heritage's Conservation Guides at www.guides.nynhp.org. For descriptions of all community types, go to http://www.dec.ny.gov/animals/29384.html and click on Draft Ecological Communities of New York State.

The following rare plants and rare animals have historical records at your project site, or in its vicinity.

The following rare plants and animals were documented in the vicinity of the project site at one time, but have not been documented there since 1979 or earlier, and/or there is uncertainty regarding their continued presence. There is no recent information on these plants and animals in the vicinity of the project site and their current status there is unknown. In most cases the precise location of the plant or animal in this vicinity at the time it was last documented is also unknown.

If suitable habitat for these plants or animals is present in the vicinity of the project site, it is possible that they may still occur there. We recommend that any field surveys to the site include a search for these species, particularly at sites that are currently undeveloped and may still contain suitable habitat.

COMMON NAME	SCIENTIFIC NAME	NYS LISTING	HERITAGE CONSERVATION STATUS	
Moths				
Golden Aster Flower Moth	Schinia tuberculum	Unlisted	Imperiled in NYS	
1942-08-16: Riverhead.				5501
Doll's Merolonche	Acronicta dolli	Unlisted	Historical Records Only in NYS	
1931-07-07: Riverhead Pine Barrens.				5499
Beetles				
New Jersey Pine Barrens Tiger Beetle	Cicindela patruela consentanea	Unlisted	Historical Records Only in NYS and Globally Rare	
1946-05-07: Calverton.				1539
New Jersey Pine Barrens Tiger Beetle	Cicindela patruela consentanea	Unlisted	Historical Records Only in NYS and Globally Rare	
1946-05-20: Flanders.				5461
Eastern Pinebarrens Tiger Beetle	Cicindela abdominalis	Unlisted	Historical Records Only in NYS	
1917-08-01: Riverhead.				6934
New Jersey Pine Barrens Tiger Beetle	Cicindela patruela consentanea	Unlisted	Historical Records Only in NYS and Globally Rare	
1950-10-20: Riverhead.				1926

COMMON NAME	SCIENTIFIC NAME	NYS LISTING	HERITAGE CONSERVATION STATUS
Vascular Plants			
Heart Sorrel	Rumex hastatulus	Endangered	Historical Records Only in NYS
1878-07-05: Aquebogue. Sandy shore.			5682
Atlantic White Cedar	Chamaecyparis thyoides	Threatened	Imperiled in NYS
1923-11-17: Calverton.			4540
Flax-leaf Whitetop	Sericocarpus linifolius	Threatened	Imperiled in NYS
1927-08-14: Calverton.			5471
Great Plains Flatsedge	Cyperus lupulinus ssp. lupulinus	Threatened	Imperiled in NYS
1955-09-09: Calverton. Dry sandy soil.			5807
Marsh Straw Sedge	Carex hormathodes	Threatened	Imperiled in NYS
1927-07-02: Calverton. Moist woods.			164
Primrose-leaf Violet	Viola primulifolia	Threatened	Imperiled in NYS
1927-05-29: Calverton. Moist, open ground.			3039
Stargrass	Aletris farinosa	Threatened	Imperiled in NYS
1927-08-12: Calverton. Specimen label: Low, wet gravelly soil.			6474
Rush Bladderwort	Utricularia juncea	Endangered	Critically Imperiled in NYS
1921-09-19: Flanders. Pine barren swamp.			2153
Swamp Oats	Sphenopholis pensylvanica	Endangered	Critically Imperiled in NYS
1925-05-31: Flanders.			3247
Possum-haw	Viburnum nudum var. nudum	Endangered	Critically Imperiled in NYS
1938-08-24: Little Peconic Reservoir. Outlet of pond.			8866
Heart Sorrel	Rumex hastatulus	Endangered	Historical Records Only in NYS
1873-06-28: Peconic River. Sandy shores.			3955

COMMON NAME	SCIENTIFIC NAME	NYS LISTING	HERITAGE CONSERVATION STATUS	
Marsh Straw Sedge	Carex hormathodes	Threatened	Imperiled in NYS	
1916-06-19: Peconic River. In open gravel flat. Boggy opening in oak and pine woods with skunk cabbage.				8823
Pale Duckweed	Lemna valdiviana	Endangered	Critically Imperiled in NYS	
1873-08-26: Peconic River.				1501
Sea-pink	Sabatia stellaris	Threatened	Imperiled in NYS	
1979-07-30: Peconic River. Specimen label: Edge of road in moist sand just above Juncus zone. Sandy margin of salt marsh.				371
Minute Duckweed	Lemna perpusilla	Endangered	Critically Imperiled in NYS	
1944-10-20: Peconic River Riverhead. Floating on surface of river.				7769
Swamp Smartweed	Persicaria setacea	Endangered	Critically Imperiled in NYS	
1950-09-12: Peconic River Riverhead. Along shore.				1741
American Ipecac	Euphorbia ipecacuanhae	Endangered	Critically Imperiled in NYS	
1918-08-09: Riverhead.				4133
Coastal Goldenrod	Solidago latissimifolia	Endangered	Critically Imperiled in NYS	
1877-09-10: Riverhead.				3575
Dragon's Mouth Orchid	Arethusa bulbosa	Threatened	Imperiled in NYS	
1925-06-02: Bog. Sphagnous swamp.				4551
Few-flowered Nutrush	Scleria pauciflora var. caroliniana	Endangered	Critically Imperiled in NYS	
1950-09-12: Riverhead. Dry sandy clearing.				9046
Fibrous Bladderwort	Utricularia striata	Threatened	Imperiled in NYS	
1972-08-15: Riverhead. Warm pond edge. Wet mud.				6514
Great Plains Flatsedge	Cyperus lupulinus ssp. lupulinus	Threatened	Imperiled in NYS	
1950-09-10: Riverhead. Sandy roadsides.				2091

COMMON NAME	SCIENTIFIC NAME	NYS LISTING	HERITAGE CONSERVATION STATUS	
Heart Sorrel	Rumex hastatulus	Endangered	Historical Records Only in NYS	
1878-07-05: Riverhead.				7914
Marsh Fimbry	Fimbristylis castanea	Threatened	Imperiled in NYS	
1878-08-26: Riverhead.				48
Northern Blazing-star	Liatris scariosa var. novae-angliae	Threatened	Imperiled in NYS and Globally Uncommon	
1919-09: Riverhead. Dry shrub oak grounds.				2447
Northern Dwarf Huckleberry	Gaylussacia bigeloviana	Endangered	Critically Imperiled in NYS	
1877-08-20: Riverhead.				3457
Short-fruit Rush	Juncus brachycarpus	Endangered	Critically Imperiled in NYS	
1943-07-06: Riverhead.				9780
Southern Arrowwood	Viburnum dentatum var. venosum	Threatened	Imperiled in NYS	
1940-09-15: Riverhead.				7311
Spotted Pondweed	Potamogeton pulcher	Threatened	Imperiled in NYS	
1952-09-05: Riverhead. 1952: in dense [?] stream.				7766
Stargrass	Aletris farinosa	Threatened	Imperiled in NYS	
1949-09-01: Riverhead. Specimen label: 1920: Wet sandy shore. 1949: Dry sandy open ground.				5126
Swamp Sunflower	Helianthus angustifolius	Threatened	Imperiled in NYS	
1877-09-12: Riverhead.				2893
Virginia False Gromwell	Onosmodium virginianum	Endangered	Critically Imperiled in NYS	
1927-07-15: Riverhead.				8255
Weak Rush	Juncus debilis	Endangered	Critically Imperiled in NYS	
1894-07-03: Riverhead.				2895

COMMON NAME	SCIENTIFIC NAME	NYS LISTING	HERITAGE CONSERVATION STATUS
Small White Snakeroot	Ageratina aromatica var. aromatica	Endangered	Critically Imperiled in NYS
1952-09-05: Riverhead Pine Barrens. Specimen label: Dry woods.			4002
Oakes' Evening-primrose	Oenothera oakesiana	Threatened	Imperiled in NYS
1952-08-14: Southwest of Riverhead. Sandy soil.			4961

This report only includes records from the NY Natural Heritage databases. For most sites, comprehensive field surveys have not been conducted, and we cannot provide a definitive statement as to the presence or absence of all rare or state-listed species. This information should not be substituted for on-site surveys that may be required for environmental impact assessment.

If any rare plants or animals are documented during site visits, we request that information on the observations be provided to the New York Natural Heritage Program so that we may update our database.

Information about many of the rare animals and plants in New York, including habitat, biology, identification, conservation, and management, are available online in Natural Heritage's Conservation Guides at www.guides.nynhp.org, from NatureServe Explorer at http://www.natureserve.org/explorer, and from USDA's Plants Database at http://plants.usda.gov/index.html (for plants).

APPENDIX H

Economic and Market Trends Materials and Data

APPENDIX H-1

Suffolk County Business Patterns

1998 to 2012

1998 County Business Patterns
Suffolk NY
Major Industry

NAICS code	NAICS code description	Paid employees for paid period including March 12 (number)	First-quarter payroll ($1,000)	Annual payroll ($1,000)	Total establishments
------	Total	487168	3629870	16062744	41675
11----	Forestry, fishing, hunting, and agriculture support	C	D	D	70
21----	Mining	C	D	D	22
22----	Utilities	H	D	D	30
23----	Construction	29339	227326	1115845	5467
31----	Manufacturing	68195	621136	2629971	2519
42----	Wholesale trade	41773	400096	1784034	3346
44----	Retail trade	69499	328692	1473594	6434
48----	Transportation & warehousing	15870	102039	433038	926
51----	Information	17001	192251	928299	573
52----	Finance & insurance	24090	293051	1203681	1912
53----	Real estate & rental & leasing	6185	45255	212756	1346
54----	Professional, scientific & technical services	30992	277437	1208856	4126
55----	Management of companies & enterprises	8072	126818	538641	136
56----	Admin, support, waste mgt, remediation services	34563	190245	878436	2714
61----	Educational services	9422	42815	192351	379
62----	Health care and social assistance	70584	517967	2264862	3764
71----	Arts, entertainment & recreation	6747	24819	141256	694
72----	Accommodation & food services	29232	79072	378046	2794
81----	Other services (except public administration)	19393	91754	401040	3981
95----	Auxiliaries (exc corporate, subsidiary & regional mgt)	2724	19751	84130	55
99----	Unclassified establishments	419	1621	10719	387

Number of establishments by employment-size class

NAICS code	NAICS code description	Total establishments	'1-4'	'5-9'	'10-19'	'20-49'	'50-99'	'100-249'	'250-499'	'500-999'	'1000 or more'
------	Total	41675	25954	7046	4388	2709	876	510	129	35	28
11----	Forestry, fishing, hunting, and agriculture support	70	62	4	3	1	0	0	0	0	0
21----	Mining	22	13	1	6	2	0	0	0	0	0
22----	Utilities	30	11	2	2	4	3	4	4	0	0
23----	Construction	5467	3885	843	472	197	54	15	1	0	0
31----	Manufacturing	2519	975	487	393	381	155	91	26	7	4
42----	Wholesale trade	3346	1955	562	414	269	84	47	9	3	3
44----	Retail trade	6434	3651	1302	776	452	140	90	23	0	0
48----	Transportation & warehousing	926	618	116	62	58	39	25	6	1	1
51----	Information	573	318	60	73	56	37	23	4	0	2
52----	Finance & insurance	1912	1043	378	300	123	35	21	6	5	1
53----	Real estate & rental & leasing	1346	1009	185	101	39	9	3	0	0	0
54----	Professional, scientific & technical services	4126	3103	539	293	126	37	17	7	2	2
55----	Management of companies & enterprises	136	39	16	15	28	13	20	3	1	1
56----	Admin, support, waste mgt, remediation services	2714	1874	367	226	138	45	40	15	8	1
61----	Educational services	379	189	54	56	51	15	8	2	3	1
62----	Health care and social assistance	3764	1901	888	532	272	70	69	16	4	12
71----	Arts, entertainment & recreation	694	430	92	74	74	19	4	1	0	0
72----	Accommodation & food services	2794	1558	490	329	309	85	21	1	1	0
81----	Other services (except public administration)	3981	2947	629	246	117	32	9	1	0	0
95----	Auxiliaries (exc corporate, subsidiary & regional mgt)	55	12	11	10	11	4	3	4	0	0
99----	Unclassified establishments	387	361	20	5	1	0	0	0	0	0

2012 County Business Patterns
Suffolk County NY
Major Industry

NAICS code	NAICS code description	Paid employees for paid period including March 12 (number)	First-quarter payroll ($1,000)	Annual payroll ($1,000)	Total establishments
------	Total for all sectors	549920	6569782	26996689	48205
11----	Agriculture, Forestry, Fishing and Hunting	175	1318	6242	75
21----	Mining, Quarrying, and Oil and Gas Extraction	142	2638	12836	18
22----	Utilities	g	0	0	78
23----	Construction	37723	467468	2155076	6649
31----	Manufacturing	53332	683927	2810865	2075
42----	Wholesale Trade	39978	580179	2577777	3231
44----	Retail Trade	78830	526816	2217497	6520
48----	Transportation and Warehousing	18195	174933	721962	1209
51----	Information	13956	249958	1023492	640
52----	Finance and Insurance	22446	1024546	3279073	2496
53----	Real Estate and Rental and Leasing	6719	77090	337972	1651
54----	Professional, Scientific, and Technical Services	45442	645973	2728457	5639
55----	Management of Companies and Enterprises	10557	255641	992685	181
	Administrative and Support and Waste				
56----	Management and Remediation Services	37860	274866	1338096	3444
61----	Educational Services	12878	88746	370521	590
62----	Health Care and Social Assistance	93498	1089030	4488736	4741
71----	Arts, Entertainment, and Recreation	8918	48637	268970	858
72----	Accommodation and Food Services	43644	182188	844054	3599
81----	Other Services (except Public Administration)	24052	161395	672050	4484
99----	Industries not classified	b	232	560	27

Number of establishments by employment-size class

NAICS code	NAICS code description	Total establishments	'1-4'	'5-9'	'10-19'	'20-49'	'50-99'	'100-249'	'250-499'	'500-999'	'1000 or more'
------	Total for all sectors	48205	30237	7634	5084	3410	1048	594	138	37	23
11----	Agriculture, Forestry, Fishing and Hunting	75	67	3	5	0	0	0	0	0	0
21----	Mining, Quarrying, and Oil and Gas Extraction	18	9	5	2	2	0	0	0	0	0
22----	Utilities	78	35	10	14	10	4	5	0	0	0
23----	Construction	6649	4929	866	488	281	57	21	5	2	0
31----	Manufacturing	2075	881	364	293	304	114	88	24	5	2
42----	Wholesale Trade	3231	1905	490	397	278	98	47	14	2	0
44----	Retail Trade	6520	3638	1266	787	505	173	134	17	0	0
48----	Transportation and Warehousing	1209	790	142	95	99	45	29	6	3	0
51----	Information	640	366	68	80	70	36	13	3	2	2
52----	Finance and Insurance	2496	1492	514	318	101	37	27	6	1	0
53----	Real Estate and Rental and Leasing	1651	1311	199	95	33	10	2	1	0	0
54----	Professional, Scientific, and Technical Services	5639	4278	658	366	231	58	32	9	4	3
55----	Management of Companies and Enterprises	181	63	20	13	46	17	12	5	4	1
	Administrative and Support and Waste										
56----	Management and Remediation Services	3444	2434	433	263	172	69	54	12	5	2
61----	Educational Services	590	350	86	68	57	16	6	3	3	1
62----	Health Care and Social Assistance	4741	2210	1018	799	477	117	72	30	6	12
71----	Arts, Entertainment, and Recreation	858	509	106	109	97	29	8	0	0	0
72----	Accommodation and Food Services	3599	1755	656	547	465	142	32	2	0	0
81----	Other Services (except Public Administration)	4484	3188	730	345	182	26	12	1	0	0
99----	Industries not classified	27	27	0	0	0	0	0	0	0	0

APPENDIX H-2

Long Island Job Growth Statistics

New York State Department of Labor
Long-Term Occupational Employment Projections, 2010-2020
Long Island Region

Fastest Growing Occupations (ordered by increase in jobs)

SOC Code	Title	Percent Change	Employment 2010	Employment 2020	Increase
39-9021	Personal Care Aides	53.3%	12,210	18,720	6,510
31-1011	Home Health Aides	46.9%	13,150	19,320	6,170
31-9092	Medical Assistants	25.6%	5,770	7,250	1,480
27-2022	Coaches and Scouts	36.2%	2,710	3,690	980
29-1123	Physical Therapists	33.7%	2,730	3,650	920
13-1161	Market Research Analysts and Marketing Specialists	27.0%	3,180	4,040	860
29-2052	Pharmacy Technicians	25.2%	2,620	3,280	660
43-6013	Medical Secretaries	33.9%	1,920	2,570	650
35-3041	Food Servers, Nonrestaurant	26.7%	2,210	2,800	590
13-2052	Personal Financial Advisors	28.3%	2,050	2,630	580
15-1133	Software Developers, Systems Software	25.4%	2,130	2,670	540
29-2021	Dental Hygienists	28.5%	1,790	2,300	510
39-9031	Fitness Trainers and Aerobics Instructors	27.1%	1,810	2,300	490
29-2056	Veterinary Technologists and Technicians	41.5%	940	1,330	390
31-2022	Physical Therapist Aides	47.8%	690	1,020	330
19-1042	Medical Scientists, Except Epidemiologists	28.8%	1,110	1,430	320
21-1022	Healthcare Social Workers	24.2%	1,320	1,640	320
47-3012	Helpers--Carpenters	36.5%	850	1,160	310
21-1023	Mental Health and Substance Abuse Social Workers	24.2%	1,280	1,590	310
31-9011	Massage Therapists	30.8%	910	1,190	280
27-3091	Interpreters and Translators	31.0%	710	930	220
31-2021	Physical Therapist Assistants	32.3%	650	860	210
47-3011	Helpers--Brickmasons, Blockmasons, Stonemasons, and Tile and Marble Setters	36.5%	520	710	190
29-2032	Diagnostic Medical Sonographers	34.5%	550	740	190
21-1014	Mental Health Counselors	26.4%	720	910	190
13-1121	Meeting, Convention, and Event Planners	29.1%	550	710	160
29-1131	Veterinarians	26.2%	610	770	160
21-1091	Health Educators	32.5%	400	530	130
29-1199	Health Diagnosing and Treating Practitioners, All Other	30.8%	390	510	120
39-5094	Skincare Specialists	29.3%	410	530	120
29-1011	Chiropractors	26.3%	380	480	100
29-1181	Audiologists	36.8%	190	260	70
19-1021	Biochemists and Biophysicists	25.0%	280	350	70
47-4071	Septic Tank Servicers and Sewer Pipe Cleaners	24.1%	290	360	70
29-9091	Athletic Trainers	38.5%	130	180	50

Source: New York State Department of Labor, Division of Research and Statistics, Occupational Employment Statistics Survey
SOC - Standard Occupational Code

New York State Department of Labor
Long-Term Occupational Employment Projections, 2010-2020
Long Island Region

Fastest Growing Occupations (ordered by percent of increase)

SOC Code	Title	Percent Change	Employment 2010	Employment 2020	Increase
39-9021	Personal Care Aides	53.3%	12,210	18,720	6,510
31-2022	Physical Therapist Aides	47.8%	690	1,020	330
31-1011	Home Health Aides	46.9%	13,150	19,320	6,170
29-2056	Veterinary Technologists and Technicians	41.5%	940	1,330	390
29-9091	Athletic Trainers	38.5%	130	180	50
29-1181	Audiologists	36.8%	190	260	70
47-3011	Helpers--Brickmasons, Blockmasons, Stonemasons, and Tile and Marble Setters	36.5%	520	710	190
47-3012	Helpers--Carpenters	36.5%	850	1,160	310
27-2022	Coaches and Scouts	36.2%	2,710	3,690	980
29-2032	Diagnostic Medical Sonographers	34.5%	550	740	190
43-6013	Medical Secretaries	33.9%	1,920	2,570	650
29-1123	Physical Therapists	33.7%	2,730	3,650	920
21-1091	Health Educators	32.5%	400	530	130
31-2021	Physical Therapist Assistants	32.3%	650	860	210
27-3091	Interpreters and Translators	31.0%	710	930	220
31-9011	Massage Therapists	30.8%	910	1,190	280
29-1199	Health Diagnosing and Treating Practitioners, All Other	30.8%	390	510	120
39-5094	Skincare Specialists	29.3%	410	530	120
13-1121	Meeting, Convention, and Event Planners	29.1%	550	710	160
19-1042	Medical Scientists, Except Epidemiologists	28.8%	1,110	1,430	320
29-2021	Dental Hygienists	28.5%	1,790	2,300	510
13-2052	Personal Financial Advisors	28.3%	2,050	2,630	580
39-9031	Fitness Trainers and Aerobics Instructors	27.1%	1,810	2,300	490
13-1161	Market Research Analysts and Marketing Specialists	27.0%	3,180	4,040	860
35-3041	Food Servers, Nonrestaurant	26.7%	2,210	2,800	590
21-1014	Mental Health Counselors	26.4%	720	910	190
29-1011	Chiropractors	26.3%	380	480	100
29-1131	Veterinarians	26.2%	610	770	160
31-9092	Medical Assistants	25.6%	5,770	7,250	1,480
15-1133	Software Developers, Systems Software	25.4%	2,130	2,670	540
29-2052	Pharmacy Technicians	25.2%	2,620	3,280	660
19-1021	Biochemists and Biophysicists	25.0%	280	350	70
21-1022	Healthcare Social Workers	24.2%	1,320	1,640	320
21-1023	Mental Health and Substance Abuse Social Workers	24.2%	1,280	1,590	310
47-4071	Septic Tank Servicers and Sewer Pipe Cleaners	24.1%	290	360	70

Source: New York State Department of Labor, Division of Research and Statistics, Occupational Employment Statistics Survey
SOC - Standard Occupational Code

APPENDIX H-3

Projected Expenditure Analysis

Expenditure Analysis (2015-2020) for Primary Market

	2015 Expenditure (No. of HH: 18,584) (Median HH Income: $77,180)		2020 Projected Expenditure (Projected No. of HH: 18,927) (Projected Median HH Income: $88,565)	
	Average Amount Spent	**Total**	**Average Amount Spent**	**Total**
Apparel and Services				
Men's	$567.18	$10,540,473	$650.85	$12,318,563
Women's	$1,039.79	$19,323,457	$1,193.17	$22,583,163
Children's	$466.20	$8,663,861	$534.97	$10,125,382
Footwear	$578.10	$10,743,410	$663.38	$12,555,734
Watches & Jewelry	$191.44	$3,557,721	$219.68	$4,157,879
Apparel Products and Services (1)	$133.46	$2,480,221	$153.15	$2,898,613
Computer				
Computers and Hardware for Home Use	$282.11	$5,242,732	$323.72	$6,127,137
Portable Memory	$6.85	$127,300	$7.86	$148,775
Computer Software	$27.31	$507,529	$31.34	$593,145
Computer Accessories	$26.04	$483,927	$29.88	$565,562
Entertainment & Recreation				
Fees and Admissions				
Membership Fees for Clubs (2)	$235.65	$4,379,320	$270.41	$5,118,074
Fees for Participant Sports, excl. Trips	$167.30	$3,109,103	$191.98	$3,633,583
Admission to Movie/Theatre/Opera/Ballet	$225.71	$4,194,595	$259.01	$4,902,188
Admission to Sporting Events, excl. Trips	$87.21	$1,620,711	$100.07	$1,894,111
Fees for Recreational Lessons	$180.11	$3,347,164	$206.68	$3,911,803
Dating Services	$0.64	$11,894	$0.73	$13,900
TV/Video/Audio				
Cable and Satellite Television Services	$1,127.04	$20,944,911	$1,293.29	$24,478,143
Televisions	$185.53	$3,447,890	$212.90	$4,029,520
Satellite Dishes	$1.89	$35,124	$2.17	$41,049
VCRs, Video Cameras, and DVD Players	$13.52	$251,256	$15.51	$293,640
Miscellaneous Video Equipment	$12.97	$241,034	$14.88	$281,695
Video Cassettes and DVDs	$39.82	$740,015	$45.69	$864,849
Video Game Hardware/Accessories	$26.71	$496,379	$30.65	$580,114
Video Game Software	$32.49	$603,794	$37.28	$705,649
Streaming/Downloaded Video	$7.82	$145,327	$8.97	$169,842
Rental of Video Cassettes and DVDs	$29.00	$538,936	$33.28	$629,850
Installation of Televisions	$1.52	$28,248	$1.74	$33,013
Audio (3)	$168.72	$3,135,492	$193.61	$3,664,424
Rental and Repair of TV/Radio/Sound Equipment	$7.43	$138,079	$8.53	$161,372
Pets	$739.94	$13,751,045	$849.09	$16,070,731
Toys and Games (4)	$155.11	$2,882,564	$177.99	$3,368,829
Recreational Vehicles and Fees (5)	$318.16	$5,912,685	$365.09	$6,910,106
Sports/Recreation/Exercise Equipment (6)	$244.88	$4,550,850	$281.00	$5,318,540
Photo Equipment and Supplies (7)	$106.68	$1,982,541	$122.42	$2,316,979
Reading (8)	$209.36	$3,890,746	$240.24	$4,547,083
Catered Affairs (9)	$34.47	$640,590	$39.55	$748,653
Food				
Food at Home				
Bakery and Cereal Products	$930.98	$17,301,332	$1,068.31	$20,219,922
Meats, Poultry, Fish, and Eggs	$1,461.25	$27,155,870	$1,676.80	$31,736,838
Dairy Products	$727.67	$13,523,019	$835.01	$15,804,240
Fruits and Vegetables	$1,294.43	$24,055,687	$1,485.37	$28,113,680
Snacks and Other Food at Home (10)	$2,260.92	$42,016,937	$2,594.43	$49,104,843
Alcoholic Beverages	$742.78	$13,803,824	$852.35	$16,132,413
Nonalcoholic Beverages at Home	$626.54	$11,643,619	$718.96	$13,607,801
Health				
Nonprescription Drugs	$167.09	$3,105,201	$191.74	$3,629,022
Prescription Drugs	$639.23	$11,879,450	$733.52	$13,883,414
Eyeglasses and Contact Lenses	$117.77	$2,188,638	$135.14	$2,557,843
Household Furnishings and Equipment				
Household Textiles (13)	$130.05	$2,416,849	$149.23	$2,824,551
Furniture	$646.04	$12,006,007	$741.34	$14,031,320
Rugs	$34.46	$640,405	$39.54	$748,436
Major Appliances (14)	$351.76	$6,537,108	$403.65	$7,639,863
Housewares (15)	$94.98	$1,765,108	$108.99	$2,062,867
Small Appliances	$59.58	$1,107,235	$68.37	$1,294,016
Luggage	$12.97	$241,034	$14.88	$281,695
Telephones and Accessories	$63.15	$1,173,580	$72.47	$1,371,553
Household Operations				
Child Care	$585.90	$10,888,366	$672.33	$12,725,142
Lawn and Garden (16)	$607.17	$11,283,647	$696.74	$13,187,104
Moving/Storage/Freight Express	$96.83	$1,799,489	$111.11	$2,103,047
Housekeeping Supplies (17)	$933.71	$17,352,067	$1,071.44	$20,279,215
TOTAL	**$20,263.42**	**$376,575,397**	**$23,252.52**	**$440,100,519**

Expenditure Analysis (2015-2020) for Primary Market

	2015 Expenditure (No. of HH: 18,584) (Median HH Income: $77,180)		2020 Projected Expenditure (Projected No. of HH: 18,927) (Projected Median HH Income: $88,565)	
	Average Amount Spent	Total	Average Amount Spent	Total

(1) Apparel Products and Services includes material for making clothes, sewing patterns and notions, shoe repair and other shoe services, apparel laundry and dry cleaning, alteration, repair and tailoring of apparel, clothing rental and storage, and watch and jewelry repair.

(2) Membership Fees for Clubs includes membership fees for social, recreational, and civic clubs.

(3) Audio includes satellite radio service, sound components and systems, digital audio players, records, CDs, audio tapes, streaming/downloaded audio, tape recorders, radios, musical instruments and accessories, and rental and repair of musical instruments.

(4) Toys and Games includes toys, games, arts and crafts, tricycles, playground equipment, arcade games, and online entertainment and games.

(5) Recreational Vehicles & Fees includes docking and landing fees for boats and planes, purchase and rental of RVs or boats, and camp fees.

(6) Sports/Recreation/Exercise Equipment includes exercise equipment and gear, game tables, bicycles, camping equipment, hunting and fishing equipment, winter sports equipment, water sports equipment, other sports equipment, and rental/repair of sports/recreation/exercise equipment.

(7) Photo Equipment and Supplies includes film, film processing, photographic equipment, rental and repair of photo equipment, and photographer fees.

(8) Reading includes digital book readers, books, magazine and newspaper subscriptions, and single copies of magazines and newspapers..

(9) Catered Affairs includes expenses associated with live entertainment and rental of party supplies.

(10) Snacks and Other Food at Home includes candy, chewing gum, sugar, artificial sweeteners, jam, jelly, preserves, margarine, fat, oil, salad dressing, nondairy cream and milk, peanut butter, frozen prepared food, potato chips, nuts, salt, spices, seasonings, olives, pickles, relishes, sauces, gravy, other condiments, soup, prepared salad, prepared dessert, baby food, miscellaneous prepared food, and nonalcoholic beverages.

(11) Mortgage Payment and Basics includes mortgage interest, mortgage principal, property taxes, homeowners insurance, and ground rent.

(12) Maintenance and Remodeling Materials includes supplies/tools/equipment for painting and wallpapering, plumbing supplies and equipment, electrical/heating/AC supplies, materials for hard surface flooring, materials for roofing/gutters, materials for plaster/panel/siding, materials for patio/fence/brick work, landscaping materials, and insulation materials for owned homes.

(13) Household Textiles includes bathroom linens, bedroom linens, kitchen linens, dining room linens, other linens, curtains, draperies, slipcovers, decorative pillows, and materials for slipcovers and curtains.

(14) Major Appliances includes dishwashers, disposals, refrigerators, freezers, washers, dryers, stoves, ovens, microwaves, window air conditioners, electric floor cleaning equipment, sewing machines, and miscellaneous appliances.

(15) Housewares includes plastic dinnerware, china, flatware, glassware, serving pieces, nonelectric cookware, and tableware.

(16) Lawn and Garden includes lawn and garden supplies, equipment and care service, indoor plants, fresh flowers, and repair/rental of lawn and garden equipment.

(17) Housekeeping Supplies includes soaps and laundry detergents, cleaning products, toilet tissue, paper towels, napkins, paper/plastic/foil products, stationery, giftwrap supplies, postage, and delivery services.

(18) Personal Care Products includes hair care products, nonelectric articles for hair, wigs, hairpieces, oral hygiene products, shaving needs, perfume, cosmetics, skincare, bath products, nail products, deodorant, feminine hygiene products, adult diapers, and personal care appliances.

(19) School Books and Supplies includes school books and supplies for College, Elementary school, High school, Vocational/Technical School, Preschool/Other Schools, and Other School Supplies.

(20) Vehicle Purchases (Net Outlay) includes net outlay for new and used cars, trucks, vans, motorcycles, and motor scooters.

APPENDIX H-4

Retail MarketPlace Profiles for Other Downtowns and Market Areas

Retail MarketPlace Profile

Huntington
33 Wall St, Huntington, New York, 11743
Drive Time: 7 minutes

Latitude: 40.87231
Longitude: -73.42759

Summary Demographics	
2013 Population	47,083
2013 Households	15,900
2013 Median Disposable Income	$73,787
2013 Per Capita Income	$45,877

Industry Summary	NAICS	Demand (Retail Potential)	Supply (Retail Sales)	Retail Gap	Leakage/Surplu Factor	Number of Businesses
Total Retail Trade and Food & Drink	44-	$824,459,259	$533,855,245	$290,604,014	21.4	508
Total Retail Trade	44-45	$742,121,281	$476,988,885	$265,132,396	21.7	422
Total Food & Drink	722	$82,337,978	$56,866,360	$25,471,618	18.3	86

Industry Group	NAICS	Demand (Retail Potential)	Supply (Retail Sales)	Retail Gap	Leakage/Surplu Factor	Number of Businesses
Motor Vehicle & Parts Dealers	441	$136,175,572	$104,567,877	$31,607,695	13.1	30
Automobile Dealers	4411	$117,414,745	$91,521,151	$25,893,594	12.4	14
Other Motor Vehicle Dealers	4412	$8,067,282	$12,608,618	-$4,541,336	-22.0	10
Auto Parts, Accessories & Tire Stores	4413	$10,693,545	$1,656,693	$9,036,852	73.2	5
Furniture & Home Furnishings Stores	442	$19,415,853	$12,608,618	$6,807,235	21.3	22
Furniture Stores	4421	$9,421,297	$7,181,865	$2,239,432	13.5	7
Home Furnishings Stores	4422	$9,994,556	$5,426,753	$4,567,803	29.6	15
Electronics & Appliance Stores	443	$26,553,058	$11,860,312	$14,692,746	38.2	15
Bldg Materials, Garden Equip. & Supply Stores	444	$28,385,396	$29,396,405	-$1,011,009	-1.7	26
Bldg Material & Supplies Dealers	4441	$25,531,288	$26,715,986	-$1,184,698	-2.3	21
Lawn & Garden Equip & Supply Stores	4442	$2,854,108	$2,680,420	$173,688	3.1	5
Food & Beverage Stores	445	$136,928,382	$63,098,540	$73,829,842	36.9	71
Grocery Stores	4451	$118,347,409	$43,288,872	$75,058,537	46.4	39
Specialty Food Stores	4452	$6,560,830	$5,849,791	$711,039	5.7	24
Beer, Wine & Liquor Stores	4453	$12,020,142	$13,959,877	-$1,939,735	-7.5	7
Health & Personal Care Stores	446,4461	$61,801,716	$111,587,356	-$49,785,640	-28.7	35
Gasoline Stations	447,4471	$68,108,150	$11,267,093	$56,841,057	71.6	14
Clothing & Clothing Accessories Stores	448	$59,283,876	$52,922,639	$6,361,237	5.7	69
Clothing Stores	4481	$43,996,677	$28,476,777	$15,519,900	21.4	38
Shoe Stores	4482	$7,689,950	$4,510,455	$3,179,495	26.1	9
Jewelry, Luggage & Leather Goods Stores	4483	$7,597,249	$19,935,407	-$12,338,158	-44.8	23
Sporting Goods, Hobby, Book & Music Stores	451	$18,337,679	$6,092,143	$12,245,536	50.1	24
Sporting Goods/Hobby/Musical Instr Stores	4511	$15,960,925	$5,088,701	$10,872,224	51.7	19
Book, Periodical & Music Stores	4512	$2,376,754	$1,003,442	$1,373,312	40.6	5
General Merchandise Stores	452	$86,451,941	$5,257,626	$81,194,315	88.5	11
Department Stores Excluding Leased Depts.	4521	$37,761,260	$4,040,953	$33,720,307	80.7	4
Other General Merchandise Stores	4529	$48,690,681	$1,216,673	$47,474,008	95.1	7
Miscellaneous Store Retailers	453	$22,041,674	$22,091,333	-$49,659	-0.1	86
Florists	4531	$2,006,709	$837,086	$1,169,623	41.1	8
Office Supplies, Stationery & Gift Stores	4532	$5,106,124	$3,112,418	$1,993,706	24.3	27
Used Merchandise Stores	4533	$2,581,928	$7,893,084	-$5,311,156	-50.7	18
Other Miscellaneous Store Retailers	4539	$12,346,913	$10,248,745	$2,098,168	9.3	33
Nonstore Retailers	454	$78,637,983	$46,238,945	$32,399,038	25.9	21
Electronic Shopping & Mail-Order Houses	4541	$65,199,825	$3,565,168	$61,634,657	89.6	3
Vending Machine Operators	4542	$1,455,200	$2,253,166	-$797,966	-21.5	4
Direct Selling Establishments	4543	$11,982,958	$40,420,611	-$28,437,653	-54.3	13
Food Services & Drinking Places	722	$82,337,978	$56,866,360	$25,471,618	18.3	86
Full-Service Restaurants	7221	$42,136,205	$30,202,596	$11,933,609	16.5	33
Limited-Service Eating Places	7222	$30,438,407	$19,009,656	$11,428,751	23.1	33
Special Food Services	7223	$7,182,465	$3,926,140	$3,256,325	29.3	6
Drinking Places - Alcoholic Beverages	7224	$2,580,900	$3,727,968	-$1,147,068	-18.2	13

Data Note: Supply (retail sales) estimates sales to consumers by establishments. Sales to businesses are excluded. Demand (retail potential) estimates the expected amount spent by consumers at retail establishments. Supply and demand estimates are in current dollars. The Leakage/Surplus Factor presents a snapshot of retail opportunity. This is a measure of the relationship between supply and demand that ranges from +100 (total leakage) to -100 (total surplus). A positive value represents 'leakage' of retail opportunity outside the trade area. A negative value represents a surplus of retail sales, a market where customers are drawn in from outside the trade area. The Retail Gap represents the difference between Retail Potential and Retail Sales. Esri uses the North American Industry Classification System (NAICS) to classify businesses by their primary type of economic activity. Retail establishments are classified into 27 industry groups in the Retail Trade sector, as well as four industry groups within the Food Services & Drinking Establishments subsector. For more information on the Retail MarketPlace data, please view the methodology statement at http://www.esri.com/library/whitepapers/pdfs/esri-data-retail-marketplace.pdf.

Source: Esri and Dun & Bradstreet. Copyright 2013 Dun & Bradstreet, Inc. All rights reserved.

March 28, 2014

Retail MarketPlace Profile

Huntington Heart of Downtown

Summary Demographics	
2013 Population	116
2013 Households	69
2013 Median Disposable Income	$60,850
2013 Per Capita Income	$53,332

Industry Summary	NAICS	Demand (Retail Potential)	Supply (Retail Sales)	Retail Gap	Leakage/Surplu Factor	Number of
Total Retail Trade and Food & Drink	44-	$3,404,695	$42,291,213	-$38,886,517	-85.1	58
Total Retail Trade	44-45	$3,064,407	$33,357,061	-$30,292,654	-83.2	45
Total Food & Drink	722	$340,289	$8,934,152	-$8,593,863	-92.7	13

Industry Group	NAICS	Demand (Retail Potential)	Supply (Retail Sales)	Retail Gap	Leakage/Surplu Factor	Number of
Motor Vehicle & Parts Dealers	441	$568,073	$531,734	$36,339	3.3	1
Automobile Dealers	4411	$493,899	$531,734	-$37,835	-3.7	1
Other Motor Vehicle Dealers	4412	$30,725	$0	$30,725	100.0	0
Auto Parts, Accessories & Tire Stores	4413	$43,449	$0	$43,449	100.0	0
Furniture & Home Furnishings Stores	442	$78,470	$1,892,634	-$1,814,164	-92.0	2
Furniture Stores	4421	$39,030	$1,693,918	-$1,654,887	-95.5	1
Home Furnishings Stores	4422	$39,440	$198,717	-$159,277	-66.9	1
Electronics & Appliance Stores	4431	$109,945	$718,870	-$608,926	-73.5	1
Bldg Materials, Garden Equip. & Supply Stores	444	$109,569	$700,932	-$591,364	-73.0	2
Bldg Material & Supplies Dealers	4441	$98,262	$355,109	-$256,847	-56.7	2
Lawn & Garden Equip & Supply Stores	4442	$11,307	$345,823	-$334,516	-93.7	1
Food & Beverage Stores	445	$568,880	$9,414,803	-$8,845,924	-88.6	8
Grocery Stores	4451	$491,917	$3,959,155	-$3,467,238	-77.9	3
Specialty Food Stores	4452	$27,170	$1,039,960	-$1,012,791	-94.9	3
Beer, Wine & Liquor Stores	4453	$49,794	$4,415,688	-$4,365,895	-97.8	2
Health & Personal Care Stores	446,4461	$254,738	$2,764,952	-$2,510,214	-83.1	4
Gasoline Stations	447,4471	$288,651	$786,492	-$497,841	-46.3	1
Clothing & Clothing Accessories Stores	448	$241,367	$7,931,799	-$7,690,432	-94.1	11
Clothing Stores	4481	$178,865	$4,670,115	-$4,491,251	-92.6	6
Shoe Stores	4482	$31,352	$673,533	-$642,181	-91.1	2
Jewelry, Luggage & Leather Goods Stores	4483	$31,151	$2,588,151	-$2,557,000	-97.6	3
Sporting Goods, Hobby, Book & Music Stores	451	$76,482	$710,129	-$633,647	-80.6	3
Sporting Goods/Hobby/Musical Instr Stores	4511	$66,430	$631,584	-$565,154	-81.0	2
Book, Periodical & Music Stores	4512	$10,052	$78,545	-$68,493	-77.3	1
General Merchandise Stores	452	$358,336	$102,085	$256,251	55.7	1
Department Stores Excluding Leased Depts.	4521	$156,259	$0	$156,259	100.0	0
Other General Merchandise Stores	4529	$202,077	$102,085	$99,992	32.9	1
Miscellaneous Store Retailers	453	$91,287	$3,674,818	-$3,583,530	-95.2	10
Florists	4531	$7,665	$46,418	-$38,753	-71.7	1
Office Supplies, Stationery & Gift Stores	4532	$20,979	$537,472	-$516,493	-92.5	3
Used Merchandise Stores	4533	$10,675	$762,063	-$751,389	-97.2	2
Other Miscellaneous Store Retailers	4539	$51,969	$2,328,865	-$2,276,896	-95.6	5
Nonstore Retailers	454	$318,609	$4,127,812	-$3,809,203	-85.7	0
Electronic Shopping & Mail-Order Houses	4541	$269,109	$0	$269,109	100.0	0
Vending Machine Operators	4542	$6,041	$0	$6,041	100.0	0
Direct Selling Establishments	4543	$43,458	$4,127,812	-$4,084,353	-97.9	0
Food Services & Drinking Places	722	$340,289	$8,934,152	-$8,593,863	-92.7	13
Full-Service Restaurants	7221	$174,999	$5,518,727	-$5,343,728	-93.9	7
Limited-Service Eating Places	7222	$126,394	$2,608,580	-$2,482,186	-90.8	4
Special Food Services	7223	$27,981	$54,388	-$26,407	-32.1	0
Drinking Places - Alcoholic Beverages	7224	$10,915	$752,457	-$741,542	-97.1	2

Data Note: Supply (retail sales) estimates sales to consumers by establishments. Sales to businesses are excluded. Demand (retail potential) estimates the expected amount spent by consumers at retail establishments. Supply and demand estimates are in current dollars. The Leakage/Surplus Factor presents a snapshot of retail opportunity. This is a measure of the relationship between supply and demand that ranges from +100 (total leakage) to -100 (total surplus). A positive value represents 'leakage' of retail opportunity outside the trade area. A negative value represents a surplus of retail sales, a market where customers are drawn in from outside the trade area. The Retail Gap represents the difference between Retail Potential and Retail Sales. Esri uses the North American Industry Classification System (NAICS) to classify businesses by their primary type of economic activity. Retail establishments are classified into 27 industry groups in the Retail Trade sector, as well as four industry groups within the Food Services & Drinking Establishments subsector. For more information on the Retail MarketPlace data, please view the methodology statement at http://www.esri.com/library/whitepapers/pdfs/esri-data-retail-marketplace.pdf.

Source: Esri and Dun & Bradstreet. Copyright 2013 Dun & Bradstreet, Inc. All rights reserved.

March 18, 2014

Retail MarketPlace Profile

minutes from Downtown Port Jefferson
112 Main St, Port Jefferson, New York, 11777
Drive Time: 7 minutes

Latitude: 40.94609
Longitude: -73.06885

Summary Demographics	
2013 Population	24,178
2013 Households	8,853
2013 Median Disposable Income	$75,865
2013 Per Capita Income	$50,030

Industry Summary	NAICS	Demand (Retail Potential)	Supply (Retail Sales)	Retail Gap	Leakage/Surplu Factor	Number of Businesses
Total Retail Trade and Food & Drink	44-	$416,508,125	$430,347,717	-$13,839,592	-1.6	307
Total Retail Trade	44-45	$375,177,995	$392,094,831	-$16,916,836	-2.2	251
Total Food & Drink	722	$41,330,130	$38,252,886	$3,077,244	3.9	56

Industry Group	NAICS	Demand (Retail Potential)	Supply (Retail Sales)	Retail Gap	Leakage/Surplu Factor	Number of Businesses
Motor Vehicle & Parts Dealers	441	$69,235,360	$134,242,115	-$65,006,755	-31.9	18
Automobile Dealers	4411	$59,732,179	$117,913,369	-$58,181,190	-32.8	5
Other Motor Vehicle Dealers	4412	$4,094,302	$9,234,066	-$5,139,764	-38.6	6
Auto Parts, Accessories & Tire Stores	4413	$5,408,879	$5,102,787	$306,092	2.9	6
Furniture & Home Furnishings Stores	442	$9,855,155	$9,234,066	$621,089	3.3	16
Furniture Stores	4421	$4,778,343	$369,011	$4,409,332	85.7	2
Home Furnishings Stores	4422	$5,076,813	$8,865,055	-$3,788,242	-27.2	14
Electronics & Appliance Stores	443	$13,390,253	$6,246,396	$7,143,857	36.4	9
Bldg Materials, Garden Equip. & Supply Stores	444	$14,142,578	$12,523,941	$1,618,637	6.1	21
Bldg Material & Supplies Dealers	4441	$12,661,657	$10,465,506	$2,196,151	9.5	13
Lawn & Garden Equip & Supply Stores	4442	$1,480,921	$2,058,436	-$577,515	-16.3	7
Food & Beverage Stores	445	$68,887,480	$110,341,944	-$41,454,464	-23.1	35
Grocery Stores	4451	$59,533,037	$97,868,540	-$38,335,503	-24.4	15
Specialty Food Stores	4452	$3,296,183	$4,510,575	-$1,214,392	-15.6	14
Beer, Wine & Liquor Stores	4453	$6,058,260	$7,962,830	-$1,904,570	-13.6	6
Health & Personal Care Stores	446,4461	$31,344,718	$19,867,650	$11,477,068	22.4	21
Gasoline Stations	447,4471	$34,444,539	$16,552,149	$17,892,390	35.1	8
Clothing & Clothing Accessories Stores	448	$29,904,328	$22,206,064	$7,698,264	14.8	34
Clothing Stores	4481	$22,229,996	$19,055,561	$3,174,435	7.7	23
Shoe Stores	4482	$3,860,268	$272,800	$3,587,468	86.8	1
Jewelry, Luggage & Leather Goods Stores	4483	$3,814,064	$2,877,704	$936,360	14.0	11
Sporting Goods, Hobby, Book & Music Stores	451	$9,235,416	$11,805,773	-$2,570,357	-12.2	25
Sporting Goods/Hobby/Musical Instr Stores	4511	$8,039,686	$10,643,919	-$2,604,233	-13.9	18
Book, Periodical & Music Stores	4512	$1,195,730	$1,161,854	$33,876	1.4	7
General Merchandise Stores	452	$43,598,906	$12,650,542	$30,948,364	55.0	6
Department Stores Excluding Leased Depts.	4521	$19,061,778	$10,159,369	$8,902,409	30.5	2
Other General Merchandise Stores	4529	$24,537,128	$2,491,172	$22,045,956	81.6	4
Miscellaneous Store Retailers	453	$11,200,122	$21,482,464	-$10,282,342	-31.5	49
Florists	4531	$1,038,762	$905,698	$133,064	6.8	5
Office Supplies, Stationery & Gift Stores	4532	$2,584,927	$7,250,510	-$4,665,583	-47.4	13
Used Merchandise Stores	4533	$1,300,235	$2,376,520	-$1,076,285	-29.3	5
Other Miscellaneous Store Retailers	4539	$6,276,199	$10,949,737	-$4,673,538	-27.1	26
Nonstore Retailers	454	$39,939,140	$14,941,726	$24,997,414	45.5	10
Electronic Shopping & Mail-Order Houses	4541	$32,939,572	$9,843,678	$23,095,894	54.0	4
Vending Machine Operators	4542	$730,811	$2,917,426	-$2,186,615	-59.9	2
Direct Selling Establishments	4543	$6,268,757	$2,180,622	$4,088,135	48.4	4
Food Services & Drinking Places	722	$41,330,130	$38,252,886	$3,077,244	3.9	56
Full-Service Restaurants	7221	$21,120,341	$23,495,631	-$2,375,290	-5.3	28
Limited-Service Eating Places	7222	$15,249,548	$10,618,368	$4,631,180	17.9	15
Special Food Services	7223	$3,668,721	$1,825,543	$1,843,178	33.5	3
Drinking Places - Alcoholic Beverages	7224	$1,291,519	$2,313,344	-$1,021,825	-28.3	10

Data Note: Supply (retail sales) estimates sales to consumers by establishments. Sales to businesses are excluded. Demand (retail potential) estimates the expected amount spent by consumers at retail establishments. Supply and demand estimates are in current dollars. The Leakage/Surplus Factor presents a snapshot of retail opportunity. This is a measure of the relationship between supply and demand that ranges from +100 (total leakage) to -100 (total surplus). A positive value represents 'leakage' of retail opportunity outside the trade area. A negative value represents a surplus of retail sales, a market where customers are drawn in from outside the trade area. The Retail Gap represents the difference between Retail Potential and Retail Sales. Esri uses the North American Industry Classification System (NAICS) to classify businesses by their primary type of economic activity. Retail establishments are classified into 27 industry groups in the Retail Trade sector, as well as four industry groups within the Food Services & Drinking Establishments subsector. For more information on the Retail MarketPlace data, please view the methodology statement at http://www.esri.com/library/whitepapers/pdfs/esri-data-retail-marketplace.pdf.

Source: Esri and Dun & Bradstreet. Copyright 2013 Dun & Bradstreet, Inc. All rights reserved.

March 28, 2014

Retail MarketPlace Profile

Port Jefferson Downtown

Summary Demographics	
2013 Population	209
2013 Households	132
2013 Median Disposable Income	$70,075
2013 Per Capita Income	$50,929

Industry Summary	NAICS	Demand (Retail Potential)	Supply (Retail Sales)	Retail Gap	Leakage/Surplu Factor	Number of
Total Retail Trade and Food & Drink	44-	$5,623,207	$22,666,093	-$17,042,886	-60.2	35
Total Retail Trade	44-45	$5,056,090	$16,288,692	-$11,232,602	-52.6	28
Total Food & Drink	722	$567,118	$6,377,401	-$5,810,283	-83.7	7

Industry Group	NAICS	Demand (Retail Potential)	Supply (Retail Sales)	Retail Gap	Leakage/Surplu Factor	Number of
Motor Vehicle & Parts Dealers	441	$928,296	$416,479	$511,817	38.1	1
Automobile Dealers	4411	$801,715	$0	$801,715	100.0	0
Other Motor Vehicle Dealers	4412	$54,029	$150,265	-$96,237	-47.1	0
Auto Parts, Accessories & Tire Stores	4413	$72,553	$266,213	-$193,660	-57.2	1
Furniture & Home Furnishings Stores	442	$130,679	$1,233,045	-$1,102,365	-80.8	3
Furniture Stores	4421	$63,918	$0	$63,918	100.0	0
Home Furnishings Stores	4422	$66,762	$1,233,045	-$1,166,283	-89.7	3
Electronics & Appliance Stores	4431	$182,771	$158,915	$23,856	7.0	0
Bldg Materials, Garden Equip. & Supply Stores	444	$197,223	$124,543	$72,680	22.6	1
Bldg Material & Supplies Dealers	4441	$178,459	$124,543	$53,916	17.8	1
Lawn & Garden Equip & Supply Stores	4442	$18,764	$0	$18,764	100.0	0
Food & Beverage Stores	445	$934,321	$1,477,485	-$543,164	-22.5	2
Grocery Stores	4451	$806,506	$409,191	$397,315	32.7	1
Specialty Food Stores	4452	$44,663	$615,759	-$571,096	-86.5	1
Beer, Wine & Liquor Stores	4453	$83,153	$452,535	-$369,382	-69.0	0
Health & Personal Care Stores	446,4461	$421,205	$3,339,979	-$2,918,773	-77.6	2
Gasoline Stations	447,4471	$464,203	$0	$464,203	100.0	0
Clothing & Clothing Accessories Stores	448	$399,906	$7,366,155	-$6,966,249	-89.7	6
Clothing Stores	4481	$295,270	$7,050,886	-$6,755,616	-92.0	5
Shoe Stores	4482	$51,790	$0	$51,790	100.0	0
Jewelry, Luggage & Leather Goods Stores	4483	$52,846	$315,269	-$262,424	-71.3	1
Sporting Goods, Hobby, Book & Music Stores	451	$126,861	$437,176	-$310,316	-55.0	5
Sporting Goods/Hobby/Musical Instr Stores	4511	$110,456	$240,926	-$130,470	-37.1	3
Book, Periodical & Music Stores	4512	$16,405	$196,250	-$179,845	-84.6	2
General Merchandise Stores	452	$588,795	$145,602	$443,193	60.3	0
Department Stores Excluding Leased Depts.	4521	$257,302	$0	$257,302	100.0	0
Other General Merchandise Stores	4529	$331,493	$145,602	$185,891	39.0	0
Miscellaneous Store Retailers	453	$150,805	$1,533,361	-$1,382,555	-82.1	7
Florists	4531	$13,051	$81,940	-$68,889	-72.5	1
Office Supplies, Stationery & Gift Stores	4532	$34,920	$70,341	-$35,421	-33.7	1
Used Merchandise Stores	4533	$17,768	$313,867	-$296,099	-89.3	0
Other Miscellaneous Store Retailers	4539	$85,067	$1,067,212	-$982,146	-85.2	5
Nonstore Retailers	454	$531,024	$55,953	$475,071	80.9	0
Electronic Shopping & Mail-Order Houses	4541	$447,506	$0	$447,506	100.0	0
Vending Machine Operators	4542	$9,931	$0	$9,931	100.0	0
Direct Selling Establishments	4543	$73,586	$55,953	$17,634	13.6	0
Food Services & Drinking Places	722	$567,118	$6,377,401	-$5,810,283	-83.7	7
Full-Service Restaurants	7221	$291,533	$3,863,606	-$3,572,073	-86.0	3
Limited-Service Eating Places	7222	$210,163	$1,754,902	-$1,544,739	-78.6	2
Special Food Services	7223	$47,074	$361,762	-$314,688	-77.0	1
Drinking Places - Alcoholic Beverages	7224	$18,347	$397,131	-$378,784	-91.2	1

Data Note: Supply (retail sales) estimates sales to consumers by establishments. Sales to businesses are excluded. Demand (retail potential) estimates the expected amount spent by consumers at retail establishments. Supply and demand estimates are in current dollars. The Leakage/Surplus Factor presents a snapshot of retail opportunity. This is a measure of the relationship between supply and demand that ranges from +100 (total leakage) to -100 (total surplus). A positive value represents 'leakage' of retail opportunity outside the trade area. A negative value represents a surplus of retail sales, a market where customers are drawn in from outside the trade area. The Retail Gap represents the difference between Retail Potential and Retail Sales. Esri uses the North American Industry Classification System (NAICS) to classify businesses by their primary type of economic activity. Retail establishments are classified into 27 industry groups in the Retail Trade sector, as well as four industry groups within the Food Services & Drinking Establishments subsector. For more information on the Retail MarketPlace data, please view the methodology statement at http://www.esri.com/library/whitepapers/pdfs/esri-data-retail-marketplace.pdf.

Source: Esri and Dun & Bradstreet. Copyright 2013 Dun & Bradstreet, Inc. All rights reserved.

February 14, 2014

Retail MarketPlace Profile

7 minutes from Patchogue Downtown
54 E Main St, Davis Park, New York, 11772
Drive Time: 7 minutes

Latitude: 40.76566
Longitude: -73.01387

Summary Demographics	
2013 Population	58,104
2013 Households	21,001
2013 Median Disposable Income	$54,981
2013 Per Capita Income	$32,895

Industry Summary	NAICS	Demand (Retail Potential)	Supply (Retail Sales)	Retail Gap	Leakage/Surplu Factor	Number of Businesses
Total Retail Trade and Food & Drink	44-	$725,324,429	$1,184,380,478	-$459,056,049	-24.0	591
Total Retail Trade	44-45	$653,277,563	$1,136,850,157	-$483,572,594	-27.0	505
Total Food & Drink	722	$72,046,866	$47,530,321	$24,516,545	20.5	86

Industry Group	NAICS	Demand (Retail Potential)	Supply (Retail Sales)	Retail Gap	Leakage/Surplu Factor	Number of Businesses
Motor Vehicle & Parts Dealers	441	$120,314,434	$302,064,153	-$181,749,719	-43.0	68
Automobile Dealers	4411	$104,461,969	$276,536,641	-$172,074,672	-45.2	28
Other Motor Vehicle Dealers	4412	$6,535,179	$11,091,950	-$4,556,771	-25.9	14
Auto Parts, Accessories & Tire Stores	4413	$9,317,287	$20,249,073	-$10,931,786	-37.0	27
Furniture & Home Furnishings Stores	442	$16,724,069	$11,091,950	$5,632,119	20.2	28
Furniture Stores	4421	$8,227,309	$5,101,313	$3,125,996	23.5	11
Home Furnishings Stores	4422	$8,496,760	$5,990,637	$2,506,123	17.3	17
Electronics & Appliance Stores	443	$22,976,306	$47,029,251	-$24,052,945	-34.4	28
Bldg Materials, Garden Equip. & Supply Stores	444	$21,047,977	$40,678,085	-$19,630,108	-31.8	35
Bldg Material & Supplies Dealers	4441	$18,565,565	$40,154,807	-$21,589,242	-36.8	33
Lawn & Garden Equip & Supply Stores	4442	$2,482,412	$523,278	$1,959,134	65.2	2
Food & Beverage Stores	445	$123,057,054	$204,902,659	-$81,845,605	-25.0	76
Grocery Stores	4451	$106,793,015	$184,115,955	-$77,322,940	-26.6	47
Specialty Food Stores	4452	$5,916,224	$4,847,459	$1,068,765	9.9	20
Beer, Wine & Liquor Stores	4453	$10,347,815	$15,939,245	-$5,591,430	-21.3	10
Health & Personal Care Stores	446,4461	$54,261,840	$124,316,802	-$70,054,962	-39.2	27
Gasoline Stations	447,4471	$61,950,301	$49,642,551	$12,307,750	11.0	18
Clothing & Clothing Accessories Stores	448	$51,704,530	$49,584,429	$2,120,101	2.1	75
Clothing Stores	4481	$38,794,350	$40,080,693	-$1,286,343	-1.6	42
Shoe Stores	4482	$6,856,548	$3,969,799	$2,886,749	26.7	6
Jewelry, Luggage & Leather Goods Stores	4483	$6,053,633	$5,533,937	$519,696	4.5	26
Sporting Goods, Hobby, Book & Music Stores	451	$16,042,305	$26,318,839	-$10,276,534	-24.3	28
Sporting Goods/Hobby/Musical Instr Stores	4511	$13,957,964	$24,392,465	-$10,434,501	-27.2	26
Book, Periodical & Music Stores	4512	$2,084,341	$1,926,374	$157,967	3.9	3
General Merchandise Stores	452	$76,756,906	$176,619,380	-$99,862,474	-39.4	8
Department Stores Excluding Leased Depts.	4521	$33,087,091	$1,669,976	$31,417,115	90.4	2
Other General Merchandise Stores	4529	$43,669,815	$174,949,404	-$131,279,589	-60.0	6
Miscellaneous Store Retailers	453	$19,258,354	$38,214,310	-$18,955,956	-33.0	88
Florists	4531	$1,706,997	$1,075,388	$631,609	22.7	6
Office Supplies, Stationery & Gift Stores	4532	$4,449,386	$12,780,793	-$8,331,407	-48.4	31
Used Merchandise Stores	4533	$2,206,140	$5,592,323	-$3,386,183	-43.4	6
Other Miscellaneous Store Retailers	4539	$10,895,832	$18,765,806	-$7,869,974	-26.5	45
Nonstore Retailers	454	$69,183,486	$66,387,748	$2,795,738	2.1	26
Electronic Shopping & Mail-Order Houses	4541	$56,532,414	$2,294,079	$54,238,335	92.2	4
Vending Machine Operators	4542	$1,310,487	$695,905	$614,582	30.6	4
Direct Selling Establishments	4543	$11,340,585	$63,397,765	-$52,057,180	-69.7	17
Food Services & Drinking Places	722	$72,046,866	$47,530,321	$24,516,545	20.5	86
Full-Service Restaurants	7221	$36,920,230	$26,044,226	$10,876,004	17.3	38
Limited-Service Eating Places	7222	$26,714,570	$16,341,931	$10,372,639	24.1	30
Special Food Services	7223	$6,160,806	$2,255,665	$3,905,141	46.4	5
Drinking Places - Alcoholic Beverages	7224	$2,251,261	$2,888,498	-$637,237	-12.4	14

Data Note: Supply (retail sales) estimates sales to consumers by establishments. Sales to businesses are excluded. Demand (retail potential) estimates the expected amount spent by consumers at retail establishments. Supply and demand estimates are in current dollars. The Leakage/Surplus Factor presents a snapshot of retail opportunity. This is a measure of the relationship between supply and demand that ranges from +100 (total leakage) to -100 (total surplus). A positive value represents 'leakage' of retail opportunity outside the trade area. A negative value represents a surplus of retail sales, a market where customers are drawn in from outside the trade area. The Retail Gap represents the difference between Retail Potential and Retail Sales. Esri uses the North American Industry Classification System (NAICS) to classify businesses by their primary type of economic activity. Retail establishments are classified into 27 industry groups in the Retail Trade sector, as well as four industry groups within the Food Services & Drinking Establishments subsector. For more information on the Retail MarketPlace data, please view the methodology statement at http://www.esri.com/library/whitepapers/pdfs/esri-data-retail-marketplace.pdf.

Source: Esri and Dun & Bradstreet. Copyright 2013 Dun & Bradstreet, Inc. All rights reserved.

March 28, 2014

Retail MarketPlace Profile

Patchogue Village Downtown

Summary Demographics	
2013 Population	173
2013 Households	65
2013 Median Disposable Income	$35,690
2013 Per Capita Income	$21,825

Industry Summary	NAICS	Demand (Retail Potential)	Supply (Retail Sales)	Retail Gap	Leakage/Surplu Factor	Number of
Total Retail Trade and Food & Drink	44-	$1,587,363	$74,262,895	-$72,675,532	-95.8	32
Total Retail Trade	44-45	$1,422,664	$70,880,354	-$69,457,691	-96.1	26
Total Food & Drink	722	$164,699	$3,382,541	-$3,217,842	-90.7	6

Industry Group	NAICS	Demand (Retail Potential)	Supply (Retail Sales)	Retail Gap	Leakage/Surplu Factor	Number of
Motor Vehicle & Parts Dealers	441	$251,922	$5,796,306	-$5,544,383	-91.7	2
Automobile Dealers	4411	$220,151	$5,105,933	-$4,885,782	-91.7	1
Other Motor Vehicle Dealers	4412	$12,135	$60,780	-$48,645	-66.7	0
Auto Parts, Accessories & Tire Stores	4413	$19,636	$629,592	-$609,956	-94.0	2
Furniture & Home Furnishings Stores	442	$34,888	$1,238,236	-$1,203,348	-94.5	1
Furniture Stores	4421	$17,684	$1,060,001	-$1,042,317	-96.7	1
Home Furnishings Stores	4422	$17,204	$178,235	-$161,030	-82.4	0
Electronics & Appliance Stores	4431	$50,064	$323,708	-$273,644	-73.2	1
Bldg Materials, Garden Equip. & Supply Stores	444	$39,258	$763,953	-$724,695	-90.2	1
Bldg Material & Supplies Dealers	4441	$34,839	$763,953	-$729,114	-91.3	1
Lawn & Garden Equip & Supply Stores	4442	$4,419	$0	$4,419	100.0	0
Food & Beverage Stores	445	$283,384	$2,316,323	-$2,032,939	-78.2	5
Grocery Stores	4451	$246,995	$2,096,015	-$1,849,019	-78.9	4
Specialty Food Stores	4452	$13,776	$220,308	-$206,532	-88.2	1
Beer, Wine & Liquor Stores	4453	$22,612	$0	$22,612	100.0	0
Health & Personal Care Stores	446,4461	$114,639	$39,056,145	-$38,941,505	-99.4	1
Gasoline Stations	447,4471	$137,027	$439,636	-$302,609	-52.5	1
Clothing & Clothing Accessories Stores	448	$116,484	$5,393,112	-$5,276,628	-95.8	5
Clothing Stores	4481	$87,750	$4,724,560	-$4,636,810	-96.4	4
Shoe Stores	4482	$16,077	$586,055	-$569,978	-94.7	1
Jewelry, Luggage & Leather Goods Stores	4483	$12,657	$82,497	-$69,840	-73.4	0
Sporting Goods, Hobby, Book & Music Stores	451	$35,903	$480,765	-$444,862	-86.1	1
Sporting Goods/Hobby/Musical Instr Stores	4511	$31,140	$480,765	-$449,624	-87.8	1
Book, Periodical & Music Stores	4512	$4,762	$0	$4,762	100.0	0
General Merchandise Stores	452	$172,035	$875,048	-$703,013	-67.1	1
Department Stores Excluding Leased Depts.	4521	$72,888	$165,547	-$92,659	-38.9	0
Other General Merchandise Stores	4529	$99,147	$709,501	-$610,354	-75.5	1
Miscellaneous Store Retailers	453	$40,588	$823,653	-$783,064	-90.6	4
Florists	4531	$2,955	$58,165	-$55,210	-90.3	0
Office Supplies, Stationery & Gift Stores	4532	$9,614	$87,678	-$78,064	-80.2	1
Used Merchandise Stores	4533	$4,834	$275,974	-$271,140	-96.6	1
Other Miscellaneous Store Retailers	4539	$23,186	$401,836	-$378,650	-89.1	1
Nonstore Retailers	454	$146,470	$13,373,471	-$13,227,001	-97.8	2
Electronic Shopping & Mail-Order Houses	4541	$122,067	$279,113	-$157,047	-39.1	0
Vending Machine Operators	4542	$3,052	$0	$3,052	100.0	0
Direct Selling Establishments	4543	$21,351	$13,094,358	-$13,073,007	-99.7	1
Food Services & Drinking Places	722	$164,699	$3,382,541	-$3,217,842	-90.7	6
Full-Service Restaurants	7221	$85,050	$2,234,319	-$2,149,269	-92.7	3
Limited-Service Eating Places	7222	$61,364	$301,631	-$240,268	-66.2	2
Special Food Services	7223	$12,876	$681,227	-$668,351	-96.3	0
Drinking Places - Alcoholic Beverages	7224	$5,409	$165,363	-$159,954	-93.7	1

Data Note: Supply (retail sales) estimates sales to consumers by establishments. Sales to businesses are excluded. Demand (retail potential) estimates the expected amount spent by consumers at retail establishments. Supply and demand estimates are in current dollars. The Leakage/Surplus Factor presents a snapshot of retail opportunity. This is a measure of the relationship between supply and demand that ranges from +100 (total leakage) to -100 (total surplus). A positive value represents 'leakage' of retail opportunity outside the trade area. A negative value represents a surplus of retail sales, a market where customers are drawn in from outside the trade area. The Retail Gap represents the difference between Retail Potential and Retail Sales. Esri uses the North American Industry Classification System (NAICS) to classify businesses by their primary type of economic activity. Retail establishments are classified into 27 industry groups in the Retail Trade sector, as well as four industry groups within the Food Services & Drinking Establishments subsector. For more information on the Retail MarketPlace data, please view the methodology statement at http://www.esri.com/library/whitepapers/pdfs/esri-data-retail-marketplace.pdf.

Source: Esri and Dun & Bradstreet. Copyright 2013 Dun & Bradstreet, Inc. All rights reserved.

February 19, 2014

APPENDIX H-5

Downtown Market Share

DOWNTOWN MARKET SHARE

Industry Group	Huntington			Port Jefferson			Patchogue			Riverhead		
	SUPPLY (Downtown)	SUPPLY (7 Min Drive)	Downtown Capture	SUPPLY (Downtown)	SUPPLY (7 Min Drive)	Downtown Capture	SUPPLY (Downtown)	SUPPLY (7 Min Drive)	Downtown Capture	SUPPLY (Downtown)	SUPPLY (15 Min Drive)	Downtown Capture
Motor Vehicle & Parts Dealers												
Automobile Dealers	$531,734	$91,521,151	0.6%	$0	$117,913,369	0.0%	$5,105,933	$276,536,641	1.8%	$22,686,561	$260,932,012	8.7%
Other Motor Vehicle Dealers	$0	$12,608,618	0.0%	$150,265	$9,234,066	1.6%	$60,780	$11,091,950	0.5%	$0	$14,187,697	0.0%
Auto Parts, Accessories & Tire Stores	$0	$1,656,693	0.0%	$266,213	$5,102,787	5.2%	$629,592	$20,249,073	3.1%	$303,302	$5,552,644	5.5%
Furniture & Home Furnishings Stores												
Furniture Stores	$1,693,918	$7,181,865	23.6%	$0	$369,011	0.0%	$1,060,001	$5,101,313	20.8%	$839,216	$6,685,291	12.6%
Home Furnishings Stores	$198,717	$5,426,753	3.7%	$1,233,045	$8,865,055	13.9%	$178,235	$5,990,637	3.0%	$0	$13,797,323	0.0%
Electronics & Appliance Stores	$718,870	$11,860,312	6.1%	$158,915	$6,246,396	2.5%	$323,708	$47,029,251	0.7%	$141,279	$47,482,914	0.3%
Bldg Materials, Garden Equip. & Supply Stores												
Bldg Material & Supplies Dealers	$355,109	$26,715,986	1.3%	$124,543	$10,465,506	1.2%	$763,953	$40,154,807	1.9%	$397,186	$33,072,905	1.2%
Lawn & Garden Equip & Supply Stores	$345,823	$2,680,420	12.9%	$0	$2,058,436	0.0%	$0	$523,278	0.0%	$0	$18,502,547	0.0%
Food & Beverage Stores												
Grocery Stores	$3,959,155	$43,288,872	9.1%	$409,191	$97,868,540	0.4%	$2,096,015	$184,115,955	1.1%	$3,980,903	$128,814,328	3.1%
Specialty Food Stores	$1,039,960	$5,849,791	17.8%	$615,759	$4,510,575	13.7%	$220,308	$4,847,459	4.5%	$228,495	$5,798,164	3.9%
Beer, Wine & Liquor Stores	$4,415,688	$13,959,877	31.6%	$452,535	$7,962,830	5.7%	$0	$15,939,245	0.0%	$0	$25,216,406	0.0%
Health & Personal Care Stores	$2,764,952	$111,587,356	2.5%	$3,339,979	$19,867,650	16.8%	$39,056,145	$124,316,802	31.4%	$1,920,125	$55,393,205	3.5%
Gasoline Stations	$786,492	$11,267,093	7.0%	$0	$16,552,149	0.0%	$439,636	$49,642,551	0.9%	$0	$217,524,198	0.0%
Clothing & Clothing Accessories Stores												
Clothing Stores	$4,670,115	$28,476,777	16.4%	$7,050,886	$19,055,561	37.0%	$4,724,560	$40,080,693	11.8%	$101,892	$188,688,737	0.1%
Shoe Stores	$673,533	$4,510,455	14.9%	$0	$272,800	0.0%	$586,055	$3,969,799	14.8%	$0	$41,420,782	0.0%
Jewelry, Luggage & Leather Goods Stores	$2,588,151	$19,935,407	13.0%	$315,269	$2,877,704	11.0%	$82,497	$5,533,937	1.5%	$138,716	$22,081,036	0.6%
Sporting Goods, Hobby, Book & Music Stores												
Sporting Goods/Hobby/Musical Instr Stores	$631,584	$5,088,701	12.4%	$240,926	$10,643,919	2.3%	$480,765	$24,392,465	2.0%	$290,001	$28,545,636	1.0%
Book, Periodical & Music Stores	$78,545	$1,003,442	7.8%	$196,250	$1,161,854	16.9%	$0	$1,926,374	0.0%	$233,987	$901,533	26.0%
General Merchandise Stores												
Department Stores Excluding Leased Depts.	$0	$4,040,953	0.0%	$0	$10,159,369	0.0%	$165,547	$1,669,976	9.9%	$0	$97,070,219	0.0%
Other General Merchandise Stores	$102,085	$1,216,673	8.4%	$145,602	$2,491,172	5.8%	$709,501	$174,949,404	0.4%	$0	$42,922,734	0.0%
Miscellaneous Store Retailers												
Florists	$46,418	$837,086	5.5%	$81,940	$905,698	9.0%	$58,165	$1,075,388	5.4%	$371,811	$1,672,436	22.2%
Office Supplies, Stationery & Gift Stores	$537,472	$3,112,418	17.3%	$70,341	$7,250,510	1.0%	$87,678	$12,780,793	0.7%	$1,022,729	$13,384,202	7.6%
Used Merchandise Stores	$762,063	$7,893,084	9.7%	$313,867	$2,376,520	13.2%	$275,974	$5,592,323	4.9%	$1,603,092	$5,913,835	27.1%
Other Miscellaneous Store Retailers	$2,328,865	$10,248,745	22.7%	$1,067,212	$10,949,737	9.7%	$401,836	$18,765,806	2.1%	$761,476	$37,579,960	2.0%
Nonstore Retailers												
Electronic Shopping & Mail-Order Houses	$0	$3,565,168	0.0%	$0	$9,843,678	0.0%	$279,113	$2,294,079	12.2%	$581,861	$20,927,735	2.8%
Vending Machine Operators	$0	$2,253,166	0.0%	$0	$2,917,426	0.0%	$0	$695,905	0.0%	$0	$746,547	0.0%
Direct Selling Establishments	$4,127,812	$40,420,611	10.2%	$55,953	$2,180,622	2.6%	$13,094,358	$63,397,765	20.7%	$0	$56,390,551	0.0%
Food Services & Drinking Places												
Full-Service Restaurants	$5,518,727	$30,202,596	18.3%	$3,863,606	$23,495,631	16.4%	$2,234,319	$26,044,226	8.6%	$2,384,681	$30,105,438	7.9%
Limited-Service Eating Places	$2,608,580	$19,009,656	13.7%	$1,754,902	$10,618,368	16.5%	$301,631	$16,341,931	1.8%	$682,759	$55,583,331	1.2%
Special Food Services	$54,388	$3,926,140	1.4%	$361,762	$1,825,543	19.8%	$681,227	$2,255,665	30.2%	$0	$7,644,684	0.0%
Drinking Places - Alcoholic Beverages	$752,457	$3,727,968	20.2%	$397,131	$2,313,344	17.2%	$165,363	$2,888,498	5.7%	$239,144	$2,917,966	8.2%
Total	**$42,291,213**	**$535,073,833**	**7.9%**	**$22,666,092**	**$428,355,826**	**5.3%**	**$74,262,895**	**$1,190,193,989**	**6.2%**	**$38,909,216**	**$1,487,456,996**	**2.62%**

Average "Downtown Market Share"	6.47%
Current Riverhead Downtown Market Share:	2.62%
Potential for Additional Market Share	3.85%

APPENDIX H-6

Primary and Secondary Market Area Retail Marketplace Profiles

Retail MarketPlace Profile

Riverhead Primary Market Area 1
Area: 118.87 square miles

Prepared by Esri
Latitude: 40.90360306
Longitude: -72.7085562

Summary Demographics	
2015 Population	51,848
2015 Households	18,584
2015 Median Disposable Income	$57,246
2015 Per Capita Income	$36,049

Industry Summary	NAICS	Demand (Retail Potential)	Supply (Retail Sales)	Retail Gap	Leakage/Surplus Factor	Number of Businesses
Total Retail Trade and Food & Drink	44-45,722	$730,038,282	$1,301,453,727	-$571,415,445	-28.1	606
Total Retail Trade	44-45	$657,113,786	$1,203,058,584	-$545,944,798	-29.3	519
Total Food & Drink	722	$72,924,496	$98,395,143	-$25,470,647	-14.9	87

Industry Group	NAICS	Demand (Retail Potential)	Supply (Retail Sales)	Retail Gap	Leakage/Surplus Factor	Number of Businesses
Motor Vehicle & Parts Dealers	441	$129,440,319	$189,009,985	-$59,569,666	-18.7	37
Automobile Dealers	4411	$114,018,888	$171,647,183	-$57,628,295	-20.2	13
Other Motor Vehicle Dealers	4412	$7,119,772	$12,840,214	-$5,720,442	-28.7	12
Auto Parts, Accessories & Tire Stores	4413	$8,301,659	$4,522,587	$3,779,072	29.5	11
Furniture & Home Furnishings Stores	442	$16,588,004	$20,281,390	-$3,693,386	-10.0	24
Furniture Stores	4421	$7,928,512	$5,463,585	$2,464,927	18.4	11
Home Furnishings Stores	4422	$8,659,492	$14,817,805	-$6,158,313	-26.2	12
Electronics & Appliance Stores	443	$22,417,108	$58,563,233	-$36,146,125	-44.6	20
Bldg Materials, Garden Equip. & Supply Stores	444	$22,424,134	$50,561,127	-$28,136,993	-38.6	45
Bldg Material & Supplies Dealers	4441	$19,431,522	$30,802,930	-$11,371,408	-22.6	30
Lawn & Garden Equip & Supply Stores	4442	$2,992,612	$19,758,197	-$16,765,585	-73.7	15
Food & Beverage Stores	445	$124,298,363	$161,718,713	-$37,420,350	-13.1	86
Grocery Stores	4451	$107,637,667	$134,033,705	-$26,396,038	-10.9	47
Specialty Food Stores	4452	$5,987,931	$5,189,820	$798,111	7.1	24
Beer, Wine & Liquor Stores	4453	$10,672,764	$22,495,188	-$11,822,424	-35.6	15
Health & Personal Care Stores	446,4461	$51,286,413	$45,497,569	$5,788,844	6.0	24
Gasoline Stations	447,4471	$56,908,320	$90,566,816	-$33,658,496	-22.8	19
Clothing & Clothing Accessories Stores	448	$50,567,032	$294,868,534	-$244,301,502	-70.7	108
Clothing Stores	4481	$37,503,262	$161,533,043	-$124,029,781	-62.3	74
Shoe Stores	4482	$6,755,958	$103,582,743	-$96,826,785	-87.8	19
Jewelry, Luggage & Leather Goods Stores	4483	$6,307,812	$29,752,748	-$23,444,936	-65.0	15
Sporting Goods, Hobby, Book & Music Stores	451	$14,730,698	$42,448,111	-$27,717,413	-48.5	32
Sporting Goods/Hobby/Musical Instr Stores	4511	$12,841,782	$41,600,762	-$28,758,980	-52.8	26
Book, Periodical & Music Stores	4512	$1,888,915	$847,348	$1,041,567	38.1	6
General Merchandise Stores	452	$71,606,845	$135,867,135	-$64,260,290	-31.0	10
Department Stores Excluding Leased Depts.	4521	$30,038,208	$91,910,773	-$61,872,565	-50.7	6
Other General Merchandise Stores	4529	$41,568,637	$43,956,362	-$2,387,725	-2.8	4
Miscellaneous Store Retailers	453	$19,673,853	$54,665,456	-$34,991,603	-47.1	89
Florists	4531	$1,511,612	$1,158,232	$353,380	13.2	9
Office Supplies, Stationery & Gift Stores	4532	$4,215,048	$11,917,409	-$7,702,361	-47.7	19
Used Merchandise Stores	4533	$2,303,572	$4,952,453	-$2,648,881	-36.5	12
Other Miscellaneous Store Retailers	4539	$11,643,621	$36,637,363	-$24,993,742	-51.8	49
Nonstore Retailers	454	$77,172,697	$59,010,515	$18,162,182	13.3	26
Electronic Shopping & Mail-Order Houses	4541	$65,270,656	$26,042,680	$39,227,976	43.0	4
Vending Machine Operators	4542	$1,221,223	$643,386	$577,837	31.0	3
Direct Selling Establishments	4543	$10,680,817	$32,324,448	-$21,643,631	-50.3	19
Food Services & Drinking Places	722	$72,924,496	$98,395,143	-$25,470,647	-14.9	87
Full-Service Restaurants	7221	$37,096,005	$28,856,711	$8,239,294	12.5	32
Limited-Service Eating Places	7222	$27,430,483	$61,126,034	-$33,695,551	-38.0	34
Special Food Services	7223	$5,851,713	$5,768,396	$83,317	0.7	10
Drinking Places - Alcoholic Beverages	7224	$2,546,295	$2,644,002	-$97,707	-1.9	11

Data Note: Supply (retail sales) estimates sales to consumers by establishments. Sales to businesses are excluded. Demand (retail potential) estimates the expected amount spent by consumers at retail establishments. Supply and demand estimates are in current dollars. The Leakage/Surplus Factor presents a snapshot of retail opportunity. This is a measure of the relationship between supply and demand that ranges from +100 (total leakage) to -100 (total surplus). A positive value represents 'leakage' of retail opportunity outside the trade area. A negative value represents a surplus of retail sales, a market where customers are drawn in from outside the trade area. The Retail Gap represents the difference between Retail Potential and Retail Sales. Esri uses the North American Industry Classification System (NAICS) to classify businesses by their primary type of economic activity. Retail establishments are classified into 27 industry groups in the Retail Trade sector, as well as four industry groups within the Food Services & Drinking Establishments subsector. For more information on the Retail MarketPlace data, please view the methodology statement at http://www.esri.com/library/whitepapers/pdfs/esri-data-retail-marketplace.pdf.

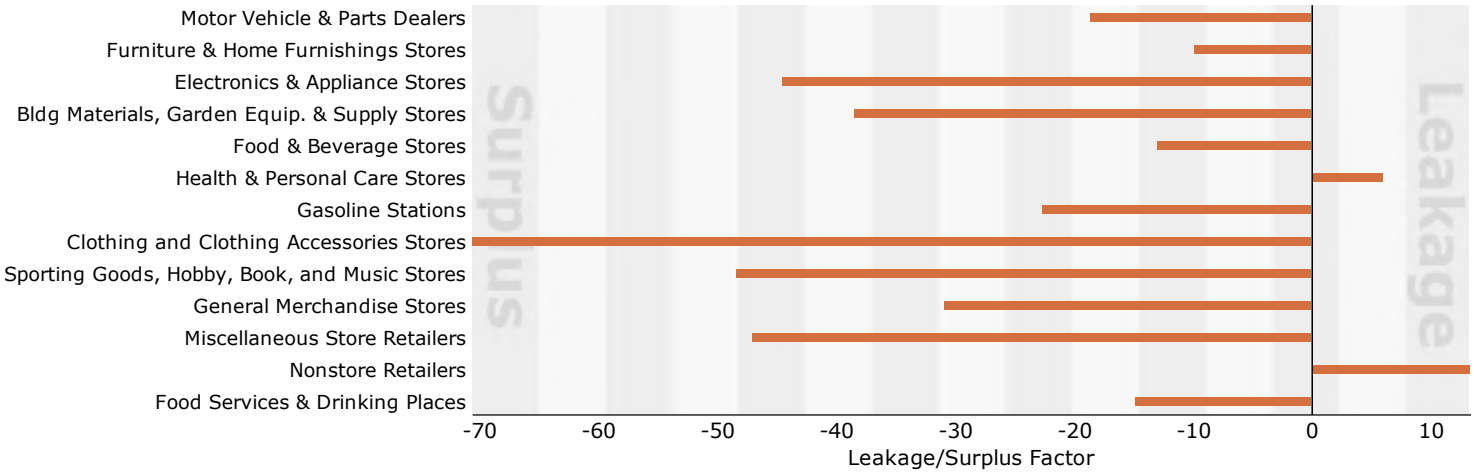
Source: Esri and Dun & Bradstreet. Copyright 2015 Dun & Bradstreet, Inc. All rights reserved.

November 02, 2015

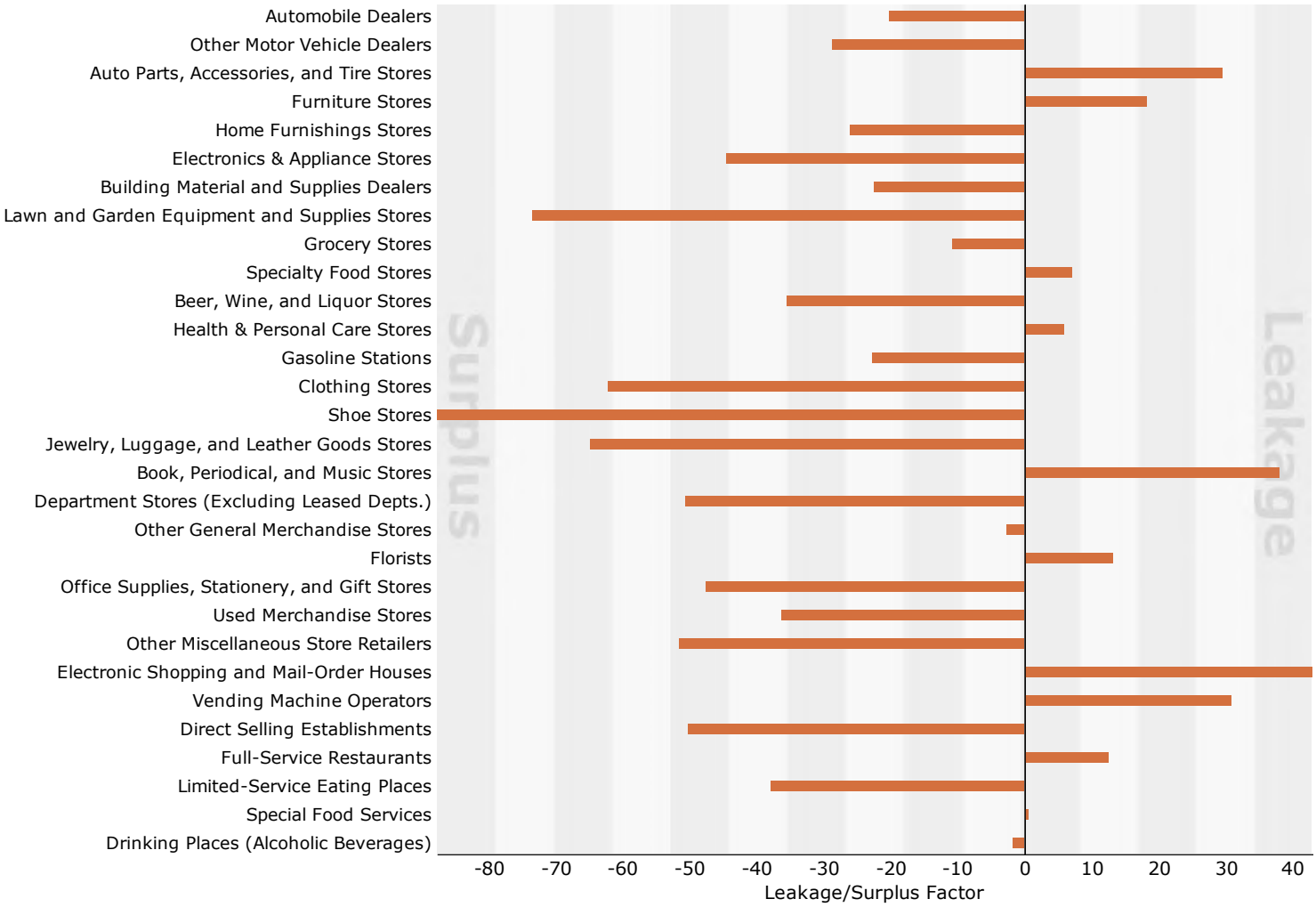
Riverhead Primary Market Area 1
Area: 118.87 square miles

Prepared by Esri
Latitude: 40.90360306
Longitude: -72.7085562

Leakage/Surplus Factor by Industry Subsector



Leakage/Surplus Factor by Industry Group



Source: Esri and Dun & Bradstreet. Copyright 2015 Dun & Bradstreet, Inc. All rights reserved.

November 02, 2015

Retail MarketPlace Profile

Riverhead Secondary Market Area
Area: 419.14 square miles

Prepared by Esri
Latitude: 40.89787240
Longitude: -72.7390272

Summary Demographics	
2015 Population	450,718
2015 Households	158,426
2015 Median Disposable Income	$61,875
2015 Per Capita Income	$36,605

Industry Summary	NAICS	Demand (Retail Potential)	Supply (Retail Sales)	Retail Gap	Leakage/Surplus Factor	Number of Businesses
Total Retail Trade and Food & Drink	44-45,722	$6,551,310,428	$5,733,084,331	$818,226,097	6.7	3,973
Total Retail Trade	44-45	$5,890,493,391	$5,235,418,746	$655,074,645	5.9	3,383
Total Food & Drink	722	$660,817,036	$497,665,585	$163,151,451	14.1	590

Industry Group	NAICS	Demand (Retail Potential)	Supply (Retail Sales)	Retail Gap	Leakage/Surplus Factor	Number of Businesses
Motor Vehicle & Parts Dealers	441	$1,166,898,705	$988,933,273	$177,965,432	8.3	251
Automobile Dealers	4411	$1,029,440,942	$862,615,726	$166,825,216	8.8	87
Other Motor Vehicle Dealers	4412	$62,262,497	$76,227,847	-$13,965,350	-10.1	77
Auto Parts, Accessories & Tire Stores	4413	$75,195,266	$50,089,700	$25,105,566	20.0	87
Furniture & Home Furnishings Stores	442	$151,271,916	$95,682,906	$55,589,010	22.5	192
Furniture Stores	4421	$72,551,634	$38,323,523	$34,228,111	30.9	66
Home Furnishings Stores	4422	$78,720,281	$57,359,383	$21,360,898	15.7	126
Electronics & Appliance Stores	443	$203,931,566	$154,227,702	$49,703,864	13.9	151
Bldg Materials, Garden Equip. & Supply Stores	444	$201,066,082	$249,236,854	-$48,170,772	-10.7	290
Bldg Material & Supplies Dealers	4441	$175,179,882	$200,782,297	-$25,602,415	-6.8	225
Lawn & Garden Equip & Supply Stores	4442	$25,886,200	$48,454,557	-$22,568,357	-30.4	64
Food & Beverage Stores	445	$1,105,297,381	$1,219,529,676	-$114,232,295	-4.9	596
Grocery Stores	4451	$955,336,222	$1,056,507,657	-$101,171,435	-5.0	334
Specialty Food Stores	4452	$53,237,084	$31,373,093	$21,863,991	25.8	170
Beer, Wine & Liquor Stores	4453	$96,724,075	$131,648,926	-$34,924,851	-15.3	91
Health & Personal Care Stores	446,4461	$454,832,269	$621,311,458	-$166,479,189	-15.5	194
Gasoline Stations	447,4471	$507,873,216	$280,959,884	$226,913,332	28.8	110
Clothing & Clothing Accessories Stores	448	$460,399,517	$481,123,992	-$20,724,475	-2.2	393
Clothing Stores	4481	$341,321,034	$316,632,350	$24,688,684	3.8	272
Shoe Stores	4482	$60,918,387	$120,124,174	-$59,205,787	-32.7	41
Jewelry, Luggage & Leather Goods Stores	4483	$58,160,096	$44,367,469	$13,792,627	13.5	80
Sporting Goods, Hobby, Book & Music Stores	451	$132,823,443	$112,476,204	$20,347,239	8.3	235
Sporting Goods/Hobby/Musical Instr Stores	4511	$115,672,417	$99,906,372	$15,766,045	7.3	188
Book, Periodical & Music Stores	4512	$17,151,026	$12,569,832	$4,581,194	15.4	47
General Merchandise Stores	452	$642,241,195	$439,130,053	$203,111,142	18.8	67
Department Stores Excluding Leased Depts.	4521	$272,146,974	$240,261,656	$31,885,318	6.2	34
Other General Merchandise Stores	4529	$370,094,221	$198,868,396	$171,225,825	30.1	33
Miscellaneous Store Retailers	453	$174,443,822	$253,332,600	-$78,888,778	-18.4	699
Florists	4531	$13,646,315	$9,679,387	$3,966,928	17.0	66
Office Supplies, Stationery & Gift Stores	4532	$37,718,192	$51,208,170	-$13,489,978	-15.2	185
Used Merchandise Stores	4533	$20,936,093	$22,577,351	-$1,641,258	-3.8	70
Other Miscellaneous Store Retailers	4539	$102,143,223	$169,867,692	-$67,724,469	-24.9	377
Nonstore Retailers	454	$689,414,279	$339,474,145	$349,940,134	34.0	205
Electronic Shopping & Mail-Order Houses	4541	$585,352,726	$45,614,710	$539,738,016	85.5	26
Vending Machine Operators	4542	$10,889,371	$4,486,111	$6,403,260	41.6	25
Direct Selling Establishments	4543	$93,172,183	$289,373,324	-$196,201,141	-51.3	154
Food Services & Drinking Places	722	$660,817,036	$497,665,585	$163,151,451	14.1	590
Full-Service Restaurants	7221	$335,844,107	$189,662,411	$146,181,696	27.8	233
Limited-Service Eating Places	7222	$247,890,970	$254,552,306	-$6,661,336	-1.3	222
Special Food Services	7223	$53,877,740	$27,006,979	$26,870,761	33.2	37
Drinking Places - Alcoholic Beverages	7224	$23,204,220	$26,443,888	-$3,239,668	-6.5	98

Data Note: Supply (retail sales) estimates sales to consumers by establishments. Sales to businesses are excluded. Demand (retail potential) estimates the expected amount spent by consumers at retail establishments. Supply and demand estimates are in current dollars. The Leakage/Surplus Factor presents a snapshot of retail opportunity. This is a measure of the relationship between supply and demand that ranges from +100 (total leakage) to -100 (total surplus). A positive value represents 'leakage' of retail opportunity outside the trade area. A negative value represents a surplus of retail sales, a market where customers are drawn in from outside the trade area. The Retail Gap represents the difference between Retail Potential and Retail Sales. Esri uses the North American Industry Classification System (NAICS) to classify businesses by their primary type of economic activity. Retail establishments are classified into 27 industry groups in the Retail Trade sector, as well as four industry groups within the Food Services & Drinking Establishments subsector. For more information on the Retail MarketPlace data, please view the methodology statement at http://www.esri.com/library/whitepapers/pdfs/esri-data-retail-marketplace.pdf.

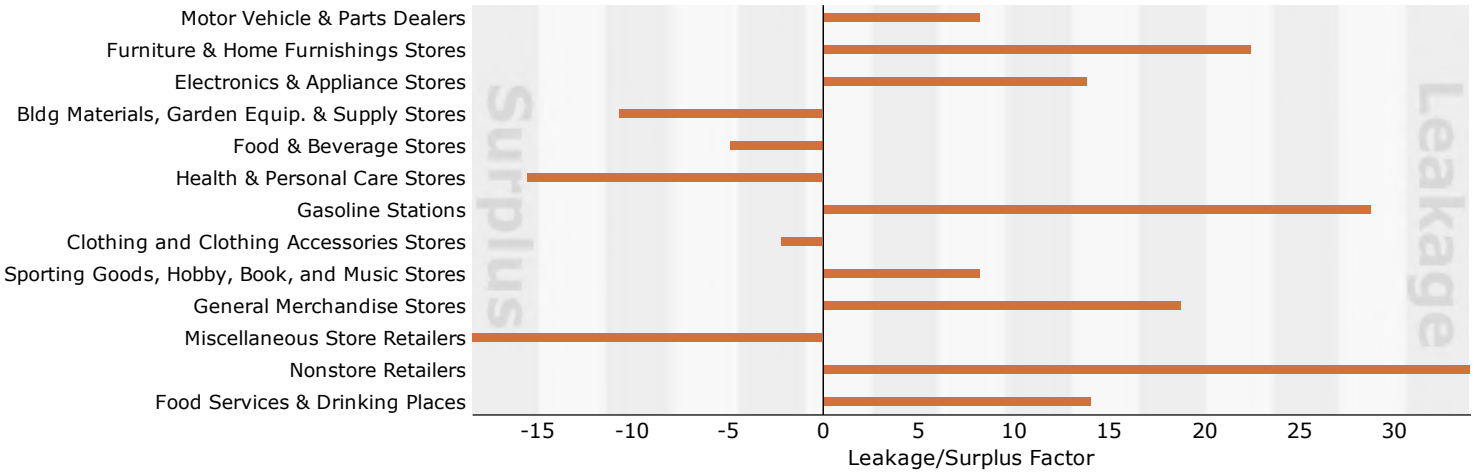
Source: Esri and Dun & Bradstreet. Copyright 2015 Dun & Bradstreet, Inc. All rights reserved.

November 02, 2015

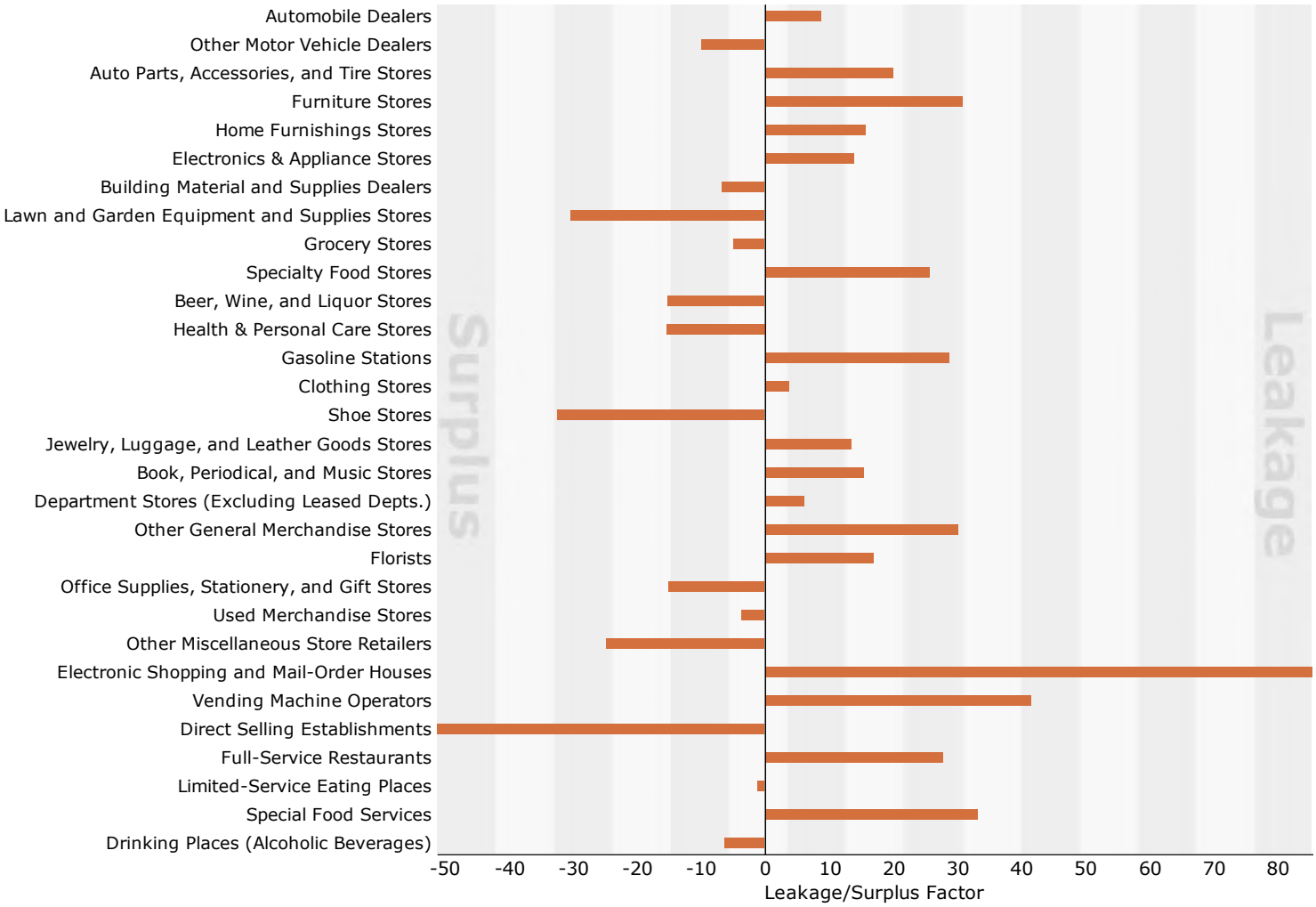
Riverhead Secondary Market Area
Area: 419.14 square miles

Prepared by Esri
Latitude: 40.89787240
Longitude: -72.7390272

Leakage/Surplus Factor by Industry Subsector



Leakage/Surplus Factor by Industry Group



Source: Esri and Dun & Bradstreet. Copyright 2015 Dun & Bradstreet, Inc. All rights reserved.

November 02, 2015

APPENDIX H-7

Tapestry Segmentation Area Profile

Tapestry Segmentation Area Profile

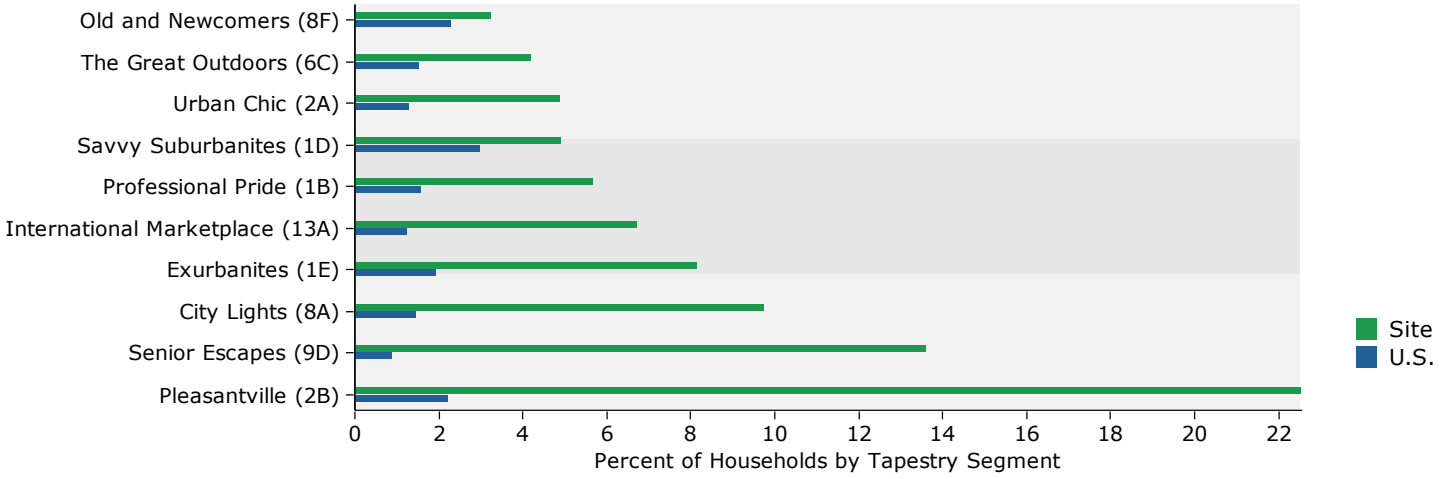
Riverhead Primary Market Area 1
Area: 118.87 square miles

Prepared by Esri

Top Twenty Tapestry Segments

		2015 Households		2015 U.S. Households		
			Cumulative		Cumulative	
Rank	**Tapestry Segment**	**Percent**	**Percent**	**Percent**	**Percent**	**Index**
1	Pleasantville (2B)	22.6%	22.6%	2.2%	2.2%	1012
2	Senior Escapes (9D)	13.6%	36.2%	0.9%	3.1%	1,499
3	City Lights (8A)	9.8%	46.0%	1.5%	4.6%	661
4	Exurbanites (1E)	8.2%	54.2%	1.9%	6.5%	420
5	International Marketplace (13A)	6.7%	60.9%	1.2%	7.7%	545
	Subtotal	**60.9%**		**7.7%**		
6	Professional Pride (1B)	5.7%	66.6%	1.6%	9.3%	356
7	Savvy Suburbanites (1D)	5.0%	71.6%	3.0%	12.3%	166
8	Urban Chic (2A)	4.9%	76.5%	1.3%	13.6%	371
9	The Great Outdoors (6C)	4.2%	80.7%	1.6%	15.2%	270
10	Old and Newcomers (8F)	3.3%	84.0%	2.3%	17.5%	140
	Subtotal	**23.1%**		**9.8%**		
11	Parks and Rec (5C)	3.1%	87.1%	2.0%	19.5%	155
12	Rural Resort Dwellers (6E)	2.9%	90.0%	1.0%	20.5%	286
13	The Elders (9C)	2.9%	92.9%	0.7%	21.2%	392
14	Soccer Moms (4A)	2.1%	95.0%	2.8%	24.0%	73
15	Down the Road (10D)	2.0%	97.0%	1.1%	25.1%	175
	Subtotal	**13.0%**		**7.6%**		
16	American Dreamers (7C)	1.8%	98.8%	1.5%	26.6%	123
17	Golden Years (9B)	1.4%	100.2%	1.3%	27.9%	102
	Subtotal	**3.2%**		**2.8%**		
	Total	**100.0%**		**28.1%**		**356**

Top Ten Tapestry Segments Site vs. U.S.



Data Note: This report identifies neighborhood segments in the area, and describes the socioeconomic quality of the immediate neighborhood. The index is a comparison of the percent of households or population in the area, by Tapestry segment, to the percent of households or population in the United States, by segment. An index of 100 is the US average.
Source: Esri

March 14, 2016

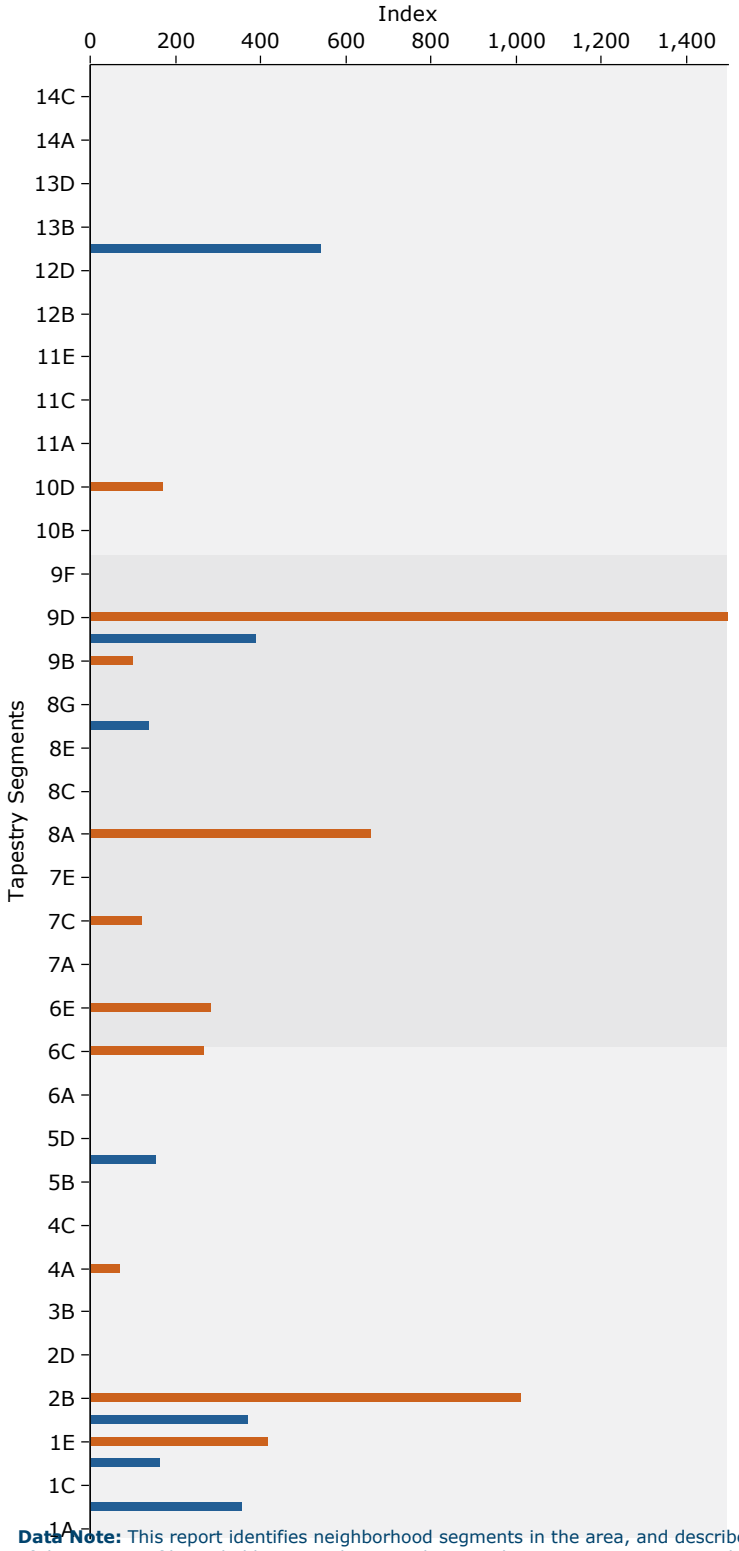
©2015 Esri

Tapestry Segmentation Area Profile

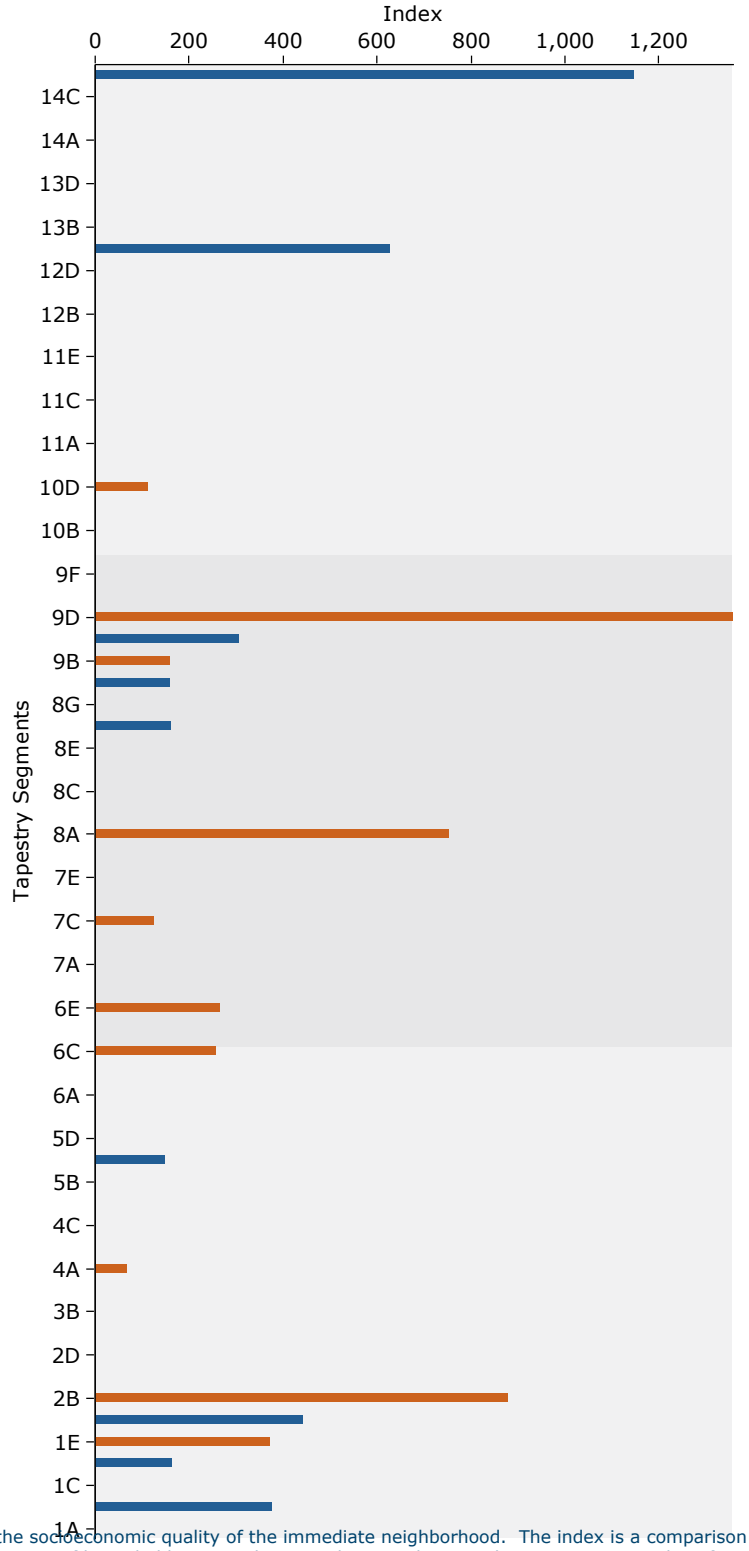
Riverhead Primary Market Area 1
Area: 118.87 square miles

Prepared by Esri

2015 Tapestry Indexes by Households



2015 Tapestry Indexes by Population



Data Note: This report identifies neighborhood segments in the area, and describes the socioeconomic quality of the immediate neighborhood. The index is a comparison of the percent of households or population in the area, by Tapestry segment, to the percent of households or population in the United States, by segment. An index of 100 is the US average.
Source: Esri

March 14, 2016

©2015 Esri

Tapestry Segmentation Area Profile

Riverhead Primary Market Area 1
Area: 118.87 square miles

Prepared by Esri

Tapestry LifeMode Groups	2015 Households			2015 Population		
	Number	Percent	Index	Number	Percent	Index
Total:	18,584	100.0%		51,848	100.0%	
1. Affluent Estates	**3,495**	**18.8%**	**193**	**10,055**	**19.4%**	**182**
Top Tier (1A)	0	0.0%	0	0	0.0%	0
Professional Pride (1B)	1,057	5.7%	356	3,715	7.2%	380
Boomburbs (1C)	0	0.0%	0	0	0.0%	0
Savvy Suburbanites (1D)	920	5.0%	166	2,747	5.3%	165
Exurbanites (1E)	1,518	8.2%	420	3,593	6.9%	373
2. Upscale Avenues	**5,103**	**27.5%**	**485**	**13,930**	**26.9%**	**461**
Urban Chic (2A)	910	4.9%	371	2,789	5.4%	444
Pleasantville (2B)	4,193	22.6%	1,012	11,141	21.5%	880
Pacific Heights (2C)	0	0.0%	0	0	0.0%	0
Enterprising Professionals (2D)	0	0.0%	0	0	0.0%	0
3. Uptown Individuals	**0**	**0.0%**	**0**	**0**	**0.0%**	**0**
Laptops and Lattes (3A)	0	0.0%	0	0	0.0%	0
Metro Renters (3B)	0	0.0%	0	0	0.0%	0
Trendsetters (3C)	0	0.0%	0	0	0.0%	0
4. Family Landscapes	**384**	**2.1%**	**28**	**1,156**	**2.2%**	**28**
Soccer Moms (4A)	384	2.1%	73	1,156	2.2%	70
Home Improvement (4B)	0	0.0%	0	0	0.0%	0
Middleburg (4C)	0	0.0%	0	0	0.0%	0
5. GenXurban	**577**	**3.1%**	**27**	**1,488**	**2.9%**	**27**
Comfortable Empty Nesters (5A)	0	0.0%	0	0	0.0%	0
In Style (5B)	0	0.0%	0	0	0.0%	0
Parks and Rec (5C)	577	3.1%	155	1,488	2.9%	150
Rustbelt Traditions (5D)	0	0.0%	0	0	0.0%	0
Midlife Constants (5E)	0	0.0%	0	0	0.0%	0
6. Cozy Country Living	**1,325**	**7.1%**	**59**	**3,151**	**6.1%**	**52**
Green Acres (6A)	0	0.0%	0	0	0.0%	0
Salt of the Earth (6B)	0	0.0%	0	0	0.0%	0
The Great Outdoors (6C)	782	4.2%	270	1,956	3.8%	260
Prairie Living (6D)	0	0.0%	0	0	0.0%	0
Rural Resort Dwellers (6E)	543	2.9%	286	1,195	2.3%	266
Heartland Communities (6F)	0	0.0%	0	0	0.0%	0
7. Ethnic Enclaves	**335**	**1.8%**	**26**	**1,170**	**2.3%**	**26**
Up and Coming Families (7A)	0	0.0%	0	0	0.0%	0
Urban Villages (7B)	0	0.0%	0	0	0.0%	0
American Dreamers (7C)	335	1.8%	123	1,170	2.3%	127
Barrios Urbanos (7D)	0	0.0%	0	0	0.0%	0
Valley Growers (7E)	0	0.0%	0	0	0.0%	0
Southwestern Families (7F)	0	0.0%	0	0	0.0%	0

Data Note: This report identifies neighborhood segments in the area, and describes the socioeconomic quality of the immediate neighborhood. The index is a comparison of the percent of households or population in the area, by Tapestry segment, to the percent of households or population in the United States, by segment. An index of 100 is the US average.
Source: Esri

March 14, 2016

©2015 Esri

Tapestry Segmentation Area Profile

Riverhead Primary Market Area 1
Area: 118.87 square miles

Prepared by Esri

Tapestry LifeMode Groups	2015 Households			2015 Population		
	Number	Percent	Index	Number	Percent	Index
Total:	18,584	100.0%		51,848	100.0%	
8. Middle Ground	**2,419**	**13.0%**	**119**	**7,317**	**14.1%**	**140**
City Lights (8A)	1,812	9.8%	661	5,701	11.0%	754
Emerald City (8B)	0	0.0%	0	0	0.0%	0
Bright Young Professionals (8C)	0	0.0%	0	0	0.0%	0
Downtown Melting Pot (8D)	0	0.0%	0	0	0.0%	0
Front Porches (8E)	0	0.0%	0	0	0.0%	0
Old and Newcomers (8F)	607	3.3%	140	1,616	3.1%	163
Hardscrabble Road (8G)	0	0.0%	0	0	0.0%	0
9. Senior Styles	**3,324**	**17.9%**	**310**	**7,111**	**13.7%**	**310**
Silver & Gold (9A)	0	0.0%	0	0	0.0%	0
Golden Years (9B)	256	1.4%	102	901	1.7%	161
The Elders (9C)	533	2.9%	392	753	1.5%	307
Senior Escapes (9D)	2,535	13.6%	1,499	5,457	10.5%	1,360
Retirement Communities (9E)	0	0.0%	0	0	0.0%	0
Social Security Set (9F)	0	0.0%	0	0	0.0%	0
10. Rustic Outposts	**371**	**2.0%**	**24**	**719**	**1.4%**	**16**
Southern Satellites (10A)	0	0.0%	0	0	0.0%	0
Rooted Rural (10B)	0	0.0%	0	0	0.0%	0
Diners & Miners (10C)	0	0.0%	0	0	0.0%	0
Down the Road (10D)	371	2.0%	175	719	1.4%	115
Rural Bypasses (10E)	0	0.0%	0	0	0.0%	0
11. Midtown Singles	**0**	**0.0%**	**0**	**0**	**0.0%**	**0**
City Strivers (11A)	0	0.0%	0	0	0.0%	0
Young and Restless (11B)	0	0.0%	0	0	0.0%	0
Metro Fusion (11C)	0	0.0%	0	0	0.0%	0
Set to Impress (11D)	0	0.0%	0	0	0.0%	0
City Commons (11E)	0	0.0%	0	0	0.0%	0
12. Hometown	**0**	**0.0%**	**0**	**0**	**0.0%**	**0**
Family Foundations (12A)	0	0.0%	0	0	0.0%	0
Traditional Living (12B)	0	0.0%	0	0	0.0%	0
Small Town Simplicity (12C)	0	0.0%	0	0	0.0%	0
Modest Income Homes (12D)	0	0.0%	0	0	0.0%	0
13. Next Wave	**1,251**	**6.7%**	**173**	**4,701**	**9.1%**	**184**
International Marketplace (13A)	1,251	6.7%	545	4,701	9.1%	629
Las Casas (13B)	0	0.0%	0	0	0.0%	0
NeWest Residents (13C)	0	0.0%	0	0	0.0%	0
Fresh Ambitions (13D)	0	0.0%	0	0	0.0%	0
High Rise Renters (13E)	0	0.0%	0	0	0.0%	0
14. Scholars and Patriots	**0**	**0.0%**	**0**	**0**	**0.0%**	**0**
Military Proximity (14A)	0	0.0%	0	0	0.0%	0
College Towns (14B)	0	0.0%	0	0	0.0%	0
Dorms to Diplomas (14C)	0	0.0%	0	0	0.0%	0
Unclassified (15)	0	0.0%	0	1,050	2.0%	1,149

Data Note: This report identifies neighborhood segments in the area, and describes the socioeconomic quality of the immediate neighborhood. The index is a comparison of the percent of households or population in the area, by Tapestry segment, to the percent of households or population in the United States, by segment. An index of 100 is the US average.
Source: Esri

March 14, 2016

©2015 Esri

Tapestry Segmentation Area Profile

Riverhead Primary Market Area 1
Area: 118.87 square miles

Prepared by Esri

Tapestry Urbanization Groups	2015 Households			2015 Population		
	Number	Percent	Index	Number	Percent	Index
Total:	18,584	100.0%		51,848	100.0%	
1. Principal Urban Center	**0**	**0.0%**	**0**	**0**	**0.0%**	**0**
Laptops and Lattes (3A)	0	0.0%	0	0	0.0%	0
Metro Renters (3B)	0	0.0%	0	0	0.0%	0
Trendsetters (3C)	0	0.0%	0	0	0.0%	0
Downtown Melting Pot (8D)	0	0.0%	0	0	0.0%	0
City Strivers (11A)	0	0.0%	0	0	0.0%	0
NeWest Residents (13C)	0	0.0%	0	0	0.0%	0
Fresh Ambitions (13D)	0	0.0%	0	0	0.0%	0
High Rise Renters (13E)	0	0.0%	0	0	0.0%	0
2. Urban Periphery	**3,398**	**18.3%**	**108**	**11,572**	**22.3%**	**120**
Pacific Heights (2C)	0	0.0%	0	0	0.0%	0
Rustbelt Traditions (5D)	0	0.0%	0	0	0.0%	0
Urban Villages (7B)	0	0.0%	0	0	0.0%	0
American Dreamers (7C)	335	1.8%	123	1,170	2.3%	127
Barrios Urbanos (7D)	0	0.0%	0	0	0.0%	0
Southwestern Families (7F)	0	0.0%	0	0	0.0%	0
City Lights (8A)	1,812	9.8%	661	5,701	11.0%	754
Bright Young Professionals (8C)	0	0.0%	0	0	0.0%	0
Metro Fusion (11C)	0	0.0%	0	0	0.0%	0
Family Foundations (12A)	0	0.0%	0	0	0.0%	0
Modest Income Homes (12D)	0	0.0%	0	0	0.0%	0
International Marketplace (13A)	1,251	6.7%	545	4,701	9.1%	629
Las Casas (13B)	0	0.0%	0	0	0.0%	0
3. Metro Cities	**607**	**3.3%**	**18**	**1,616**	**3.1%**	**19**
In Style (5B)	0	0.0%	0	0	0.0%	0
Emerald City (8B)	0	0.0%	0	0	0.0%	0
Front Porches (8E)	0	0.0%	0	0	0.0%	0
Old and Newcomers (8F)	607	3.3%	140	1,616	3.1%	163
Hardscrabble Road (8G)	0	0.0%	0	0	0.0%	0
Retirement Communities (9E)	0	0.0%	0	0	0.0%	0
Social Security Set (9F)	0	0.0%	0	0	0.0%	0
Young and Restless (11B)	0	0.0%	0	0	0.0%	0
Set to Impress (11D)	0	0.0%	0	0	0.0%	0
City Commons (11E)	0	0.0%	0	0	0.0%	0
Traditional Living (12B)	0	0.0%	0	0	0.0%	0
College Towns (14B)	0	0.0%	0	0	0.0%	0
Dorms to Diplomas (14C)	0	0.0%	0	0	0.0%	0

Data Note: This report identifies neighborhood segments in the area, and describes the socioeconomic quality of the immediate neighborhood. The index is a comparison of the percent of households or population in the area, by Tapestry segment, to the percent of households or population in the United States, by segment. An index of 100 is the US average.
Source: Esri

March 14, 2016

©2015 Esri

Tapestry Segmentation Area Profile

Riverhead Primary Market Area 1
Area: 118.87 square miles

Prepared by Esri

Tapestry Urbanization Groups	2015 Households			2015 Population		
	Number	Percent	Index	Number	Percent	Index
Total:	18,584	100.0%		51,848	100.0%	
4. Suburban Periphery	**10,348**	**55.7%**	**177**	**28,283**	**54.5%**	**169**
Top Tier (1A)	0	0.0%	0	0	0.0%	0
Professional Pride (1B)	1,057	5.7%	356	3,715	7.2%	380
Boomburbs (1C)	0	0.0%	0	0	0.0%	0
Savvy Suburbanites (1D)	920	5.0%	166	2,747	5.3%	165
Exurbanites (1E)	1,518	8.2%	420	3,593	6.9%	373
Urban Chic (2A)	910	4.9%	371	2,789	5.4%	444
Pleasantville (2B)	4,193	22.6%	1,012	11,141	21.5%	880
Enterprising Professionals (2D)	0	0.0%	0	0	0.0%	0
Soccer Moms (4A)	384	2.1%	73	1,156	2.2%	70
Home Improvement (4B)	0	0.0%	0	0	0.0%	0
Comfortable Empty Nesters (5A)	0	0.0%	0	0	0.0%	0
Parks and Rec (5C)	577	3.1%	155	1,488	2.9%	150
Midlife Constants (5E)	0	0.0%	0	0	0.0%	0
Up and Coming Families (7A)	0	0.0%	0	0	0.0%	0
Silver & Gold (9A)	0	0.0%	0	0	0.0%	0
Golden Years (9B)	256	1.4%	102	901	1.7%	161
The Elders (9C)	533	2.9%	392	753	1.5%	307
Military Proximity (14A)	0	0.0%	0	0	0.0%	0
5. Semirural	**2,906**	**15.6%**	**166**	**6,176**	**11.9%**	**130**
Middleburg (4C)	0	0.0%	0	0	0.0%	0
Heartland Communities (6F)	0	0.0%	0	0	0.0%	0
Valley Growers (7E)	0	0.0%	0	0	0.0%	0
Senior Escapes (9D)	2,535	13.6%	1,499	5,457	10.5%	1,360
Down the Road (10D)	371	2.0%	175	719	1.4%	115
Small Town Simplicity (12C)	0	0.0%	0	0	0.0%	0
6. Rural	**1,325**	**7.1%**	**42**	**3,151**	**6.1%**	**36**
Green Acres (6A)	0	0.0%	0	0	0.0%	0
Salt of the Earth (6B)	0	0.0%	0	0	0.0%	0
The Great Outdoors (6C)	782	4.2%	270	1,956	3.8%	260
Prairie Living (6D)	0	0.0%	0	0	0.0%	0
Rural Resort Dwellers (6E)	543	2.9%	286	1,195	2.3%	266
Southern Satellites (10A)	0	0.0%	0	0	0.0%	0
Rooted Rural (10B)	0	0.0%	0	0	0.0%	0
Diners & Miners (10C)	0	0.0%	0	0	0%	0
Rural Bypasses (10E)	0	0.0%	0	0	0.0%	0
Unclassified (15)	0	0.0%	0	1,050	2.0%	1,149

Data Note: This report identifies neighborhood segments in the area, and describes the socioeconomic quality of the immediate neighborhood. The index is a comparison of the percent of households or population in the area, by Tapestry segment, to the percent of households or population in the United States, by segment. An index of 100 is the US average.
Source: Esri

March 14, 2016

©2015 Esri

APPENDIX I

Alternative Development Scenarios

APPENDIX I-1

Development and Analysis of Alternative Development Scenarios

APPENDIX I-1
DEVELOPMENT AND ANALYSIS OF ALTERNATE DEVELOPMENT SCENARIOS

Three alternative development scenarios were prepared and evaluated for the overall BOA study area. The purpose of preparing the three alternative development scenarios was to identify the most ideal development scenario which would be feasible, as well as to determine areas where the development impacts on public infrastructure could be realistically mitigated. Downtown Riverhead provides the greatest density of built environment within the entire BOA study area, especially DC-1 (Main Street) Zoning District. Therefore, the alternative build-out scenarios for DC-1 district were analyzed in detail prior to developing the alternative development scenario for the entire study area.

This section is divided into seven sub-sections.

- Section 1 describes the preparation and analysis of the alternative development scenario of the DC-1 (Main Street) District.
- Section 2 includes preparation and discussion of the alternative development scenarios for the entire BOA study area.
- Section 3 includes an analysis of the impacts resulting from these alternative development scenarios on public infrastructure, and the mitigation measures that would be needed for proper functioning of public infrastructure systems.
- Section 4 includes analysis and discussion of the number of apartment units that may be accommodated in the next ten years in Downtown Riverhead.
- Section 5 includes discussion on sustainability approach through bonus density criteria.
- Section 6 includes discussion on the feasibility of a Transfer of Development (TDR) program to encourage preservation of properties located within the Recreational Designation of the Wild, Scenic, and Recreational River Corridor along West Main Street west of Downtown Riverhead.
- Lastly, Section 7 provides a list of key findings and recommendations to be used as a guide for policy changes.

1. DC-1 (Main Street) District Alternative Development Scenarios

The existing DC-1 zoning district consists of 112 parcels[1]. The current DC-1 district zoning provisions allow for 80% building coverage with a Floor Area Ratio (FAR) of 4.0. Additionally, this zoning district includes a provision to further increase allowable density to 100% building coverage (and a maximum FAR of 5.0) by special permit issued by the Town Board[2]. It is noted that the code includes no specific development requirements or provisions to provide guidance for the Town Board in granting a special permit for this increase in density. The implementation of development under these bulk regulations would permit a much higher density in the DC-1 district then exists currently, and may not be feasible given the limitations of existing infrastructure which can only support a certain level of development within the downtown.
The analysis of alternative development scenarios for DC-1 district was performed on parcel-by-parcel basis and the entire district was subdivided into smaller 'superblocks' as shown in **Figure 1**.

---

[1] Based upon the Town of Riverhead GIS parcel data.
[2] It is noted that the Table of Dimensional Requirements notes a requirement for TDR for increased density to 100%, as was recommended in the Comprehensive Plan. However, no code provisions are provided to support this and there is no TDR program established that includes the DC-1 District as a receiving zone for TDR credits.

Town of Riverhead
Peconic River/Rt. 25 Corridor

NYS BOA Step II
Nomination

APPPENDIX I
FIGURE 1
Downtown Riverhead
Super Blocks

Legend

BOA Boundary

Super Blocks

1
2
3
4
5
6
7
8
9
10

Source: Suffolk County Real Property

1 inch = 200 feet

Each superblock was then evaluated to determine the potential for redevelopment based upon several factors and observations including property ownership (private versus public or institutional ownership), current use and status of existing development, recent construction and/or renovation, listing on local or national register for historic significance or structures that appear to have historic significance or architectural value. All of this information is organized and color coded for all 112 parcels in the DC-1 district which are provided in **Table 1**. Certain parcels were strategically excluded from the build-out analysis (further discussion is provided under each development scenario).[3]

The estimated existing building floor area as illustrated in **Table 1** is 800,813 SF in the DC-1 district. The full build-out scenario was generated based upon an 80% building coverage and FAR of 4.0. As noted, several parcels were excluded from the build-out calculations including existing parking lots, alleys, structures with historic significance or architectural value, and properties which are recently constructed or renovated. The build-out was prepared based upon a simple mathematical calculation estimating building footprint 80% of lot area and 5 stories in height (consistent with the maximum FAR of 4.0). This results in a total floor area of approximately 2.64 million SF[4]. It is extremely unlikely that the existing infrastructure would support the level of development under a full build-out scenario since downtown Riverhead is already facing challenges related to traffic, parking, sewer capacity, and gas service. In addition, it is unrealistic that this level of development would be proposed. This is especially true for smaller lots, which are less likely to accommodate a 5 story structure. Structure height (or number of stories) is generally related to the size of the building footprint and use. For example, it is unrealistic to assume that a building with a small footprint such as 1,000 SF would be 5 stories tall unless it is predominantly residential on the upper levels, and the expense of construction on upper floors would likely not be justified on this size lot.

Downtown Riverhead is facing development challenges and one of reasons may be the incongruity between what the market can support versus the allowable density per the current zoning. For example, a developer interested in investing in Downtown Riverhead may not find a project financially feasible because the project would be based upon current market conditions which may warrant a maximum of 3 or 4 floors for mixed use type development. However, a property owner may be assessing their property value based on 5 stories as permitted by zoning. This causes financial mismatch and would prevent developers from being able to close on deals in order to move forward with their project.

Table 1
DC-1 District Alternative Development Scenarios

[3] The information pertaining to lot area and existing building size was obtained from the GIS parcel and building footprint data and the building floor area of upper floors was estimated based upon the building footprint and field observations. It should be noted that there are several structures within DC-1 for which the building envelop straddles one or more parcels. In such events, the existing building area was split based upon the parcel boundary to provide an estimate of the building coverage area for each parcel.

[4] The build-out estimate would be even higher if the special permit criteria was used which would allow 100% building coverage with FAR of 5.0.

First Name	Last Name	Parcel Id	Super Block	Existing Land Use	Lot Area (Acres)	Lot Area (SF)	Existing Building					Full Build-out (Bldg Covg. 80%; Impervious Covg. 100%; FAR 4.0)						Scenario - 2 3rd Floor - 40% of all buildings 4th Floor - 25% of 3rd floor buildings (Bldg. Covg. 70%; Impervious Covg. 90%; Max 4 levels)						Scenario-3 3rd Floor - 25% of all buildings 4th Floor - 25% of 3rd floor buildings (Bldg. Covg. 70%; Impervious Covg. 90%; Max 4 levels)					
							1st Floor (SF)	2nd Floor (SF)	3rd Floor (SF)	4th Floor (SF)	Total (SF)	1st Floor (SF)	2nd Floor (SF)	3rd Floor (SF)	4th Floor (SF)	5th Floor (SF)	Total (SF)	1st Floor (SF)	2nd Floor (SF)	3rd Floor (SF)	4th Floor (SF)	Total (SF)	Notes	1st Floor (SF)	2nd Floor (SF)	3rd Floor (SF)	4th Floor (SF)	Total (SF)	Notes
	149 GRIFFING AVENUE CORP	0600128000300040000	1	Mixed Use, Commerci*	0.096	4,182	2,639	2,639	0	0	5,277	3,345	3,345	3,345	3,345	3,345	16,727	2,927	2,927	1,171	293	7,318		2,927	2,927	732	183	6,769	
	BOMEL RIVERHEAD CO	0600128000300045000	1	Commercial	0.217	9,453	7,847	1,569	0	0	9,417	7,562	7,562	7,562	7,562	7,562	37,810	6,617	6,617	2,647	662	16,542		6,617	6,617	1,654	414	15,301	
TIMOTHY G	GRIFFING JR	0600128000300043000	1	Commercial	0.160	6,970	3,971	0	0	0	3,971	5,576	5,576	5,576	5,576	5,576	27,878	4,879	4,879	1,951	488	12,197		4,879	4,879	1,220	305	11,282	
	ADAJET REALTY CORP	0600128000300039000	1	Mixed Use, Commerci*	0.054	2,352	1,003	0	0	0	1,003	1,882	1,882	1,882	1,882	1,882	9,409	1,647	1,647	659	165	4,116		1,647	1,647	412	103	3,808	
	MARKEN PROPERTIES INC	0600128000300041000	1	Mixed Use, Commerci*	0.047	2,047	1,881	1,881	0	0	3,762	1,638	1,638	1,638	1,638	1,638	8,189	1,433	1,433	573	143	3,583		1,433	1,433	358	90	3,314	
SHIRLEY L	WARNER	0600128000300042000	1	Commercial	0.117	5,097	2,243	792	0	0	3,035	4,077	4,077	4,077	4,077	4,077	20,386	3,568	3,568	1,427	357	8,919		3,568	3,568	892	223	8,250	
	LUCKY HOUSE NY REALTY INC	0600128000300044000	1	Mixed Use, Commerci*	0.048	2,091	0	0	0	0	0	1,673	1,673	1,673	1,673	1,673	8,364	1,464	1,464	585	146	3,659		1,464	1,464	366	91	3,385	
CHARLES	MARED	0600128000300020000	2	Vacant	0.109	4,748	3,309	3,309	0	0	6,617	3,798	3,798	3,798	3,798	3,798	18,992	3,324	3,324	1,329	332	8,309		3,324	3,324	831	208	7,690	
KATHLEEN	STINER	0600128000300025000	2	Mixed Use	0.093	4,051	2,008	2,008	0	0	4,024	3,241	3,241	3,241	3,241	3,241	16,205	2,836	2,836	1,134	283	7,089		2,836	2,836	709	177	6,558	
	EAST END DISABILITY ASSOCIATES INC	0600128000300027000	2	Mixed Use	0.071	3,095	3,010	3,010	0	0	6,021	2,474	2,474	2,474	2,474	2,474	12,371	2,163	2,163	866	216	5,412		2,163	2,163	541	135	5,000	
GIUSEPPE	BIVONA	0600128000300028000	2	Mixed Use	0.046	2,004	2,012	2,012	0	0	4,024	1,603	1,603	1,603	1,603	1,603	8,019	1,403	1,403	561	140	3,507		1,403	1,403	351	88	3,244	
CARMINE	MARTINO	0600128000300029000	2	Commercial	0.034	1,481	1,354	0	0	0	2,707	1,185	1,185	1,185	1,185	1,185	5,924	1,037	1,037	415	103	2,592		1,037	1,037	259	65	2,392	
JOHN	MENZEL	0600128000300030001	2	Commercial	0.102	4,445	3,198	3,198	0	0	6,395	3,554	3,554	3,554	3,554	3,554	17,772	3,110	3,110	1,244	311	7,775		3,110	3,110	778	194	7,192	
	ISABELLA CORP INC	0600128000300023000	2	BANK BLDG.	0.160	7,141	6,315	6,315	6,315	0	18,946	6,315	6,315	6,315	0	0	18,946	6,315	6,315	6,315	0	18,946		6,315	6,315	6,315	0	18,946	
	WEST MAIN ST REALTY CO INC	0600128000300022000	2	Commercial	0.113	5,000	3,683	3,683	0	0	11,048	4,008	4,008	4,008	4,008	4,008	20,038	3,507	3,507	1,403	351	8,766		3,507	3,507	877	219	8,109	
	EVALUE HOME SALES INC	0600128000300019000	2	Commercial	0.050	2,178	2,178	2,178	0	0	4,344	1,742	1,742	1,742	1,742	1,742	8,712	1,525	1,525	610	152	3,812		1,525	1,525	381	95	3,526	
CHERI	NORTH	0600128000300013000	2	Commercial	0.277	9,670	0	0	0	0	0	7,736	7,736	7,736	7,736	7,736	38,681	6,769	6,769	2,708	677	16,923		6,769	6,769	1,692	423	15,634	
	SULLIVAN ENTERPRISES CORP	0600128000300006000	2	Commercial	0.025	1,263	1,144	1,144	0	0	2,288	1,011	1,011	1,011	1,011	1,011	5,053	884	884	354	88	2,211		884	884	221	55	2,045	
MARIA PATRICIA	TUTTO	0600128000300026000	2	Mixed Use	0.028	1,220	1,066	1,066	0	0	2,131	976	976	976	976	976	4,879	854	854	342	85	2,134		854	854	213	53	1,970	
	ELEVO MANAGEMENT LLC	0600128000300060000	2	Commercial	0.095	4,138	0	0	0	0	0	3,311	3,311	3,311	3,311	3,311	16,553	2,897	2,897	1,159	290	7,242		2,897	2,897	724	181	6,699	
	RIVERHEAD PUB PARKING DIST 1	0600128000000014000	2	Parking Lot	0.573	25,047	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0		0	0	0	0	0	
CHERI	NORTH	0600128000300020001	2	Parking Lot	0.001	44	0	0	0	0	0	35	35	35	35	35	174	0	0	0	0	0		0	0	0	0	0	
PUBLIC PARKING	RIVERHEAD	0600128000000020000	2	Alley	0.016	697	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0		0	0	0	0	0	
	RIVERHEAD TOWN OF	0600128000000030002	2	Parking Lot	0.831	37,244	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0		0	0	0	0	0	
	RIVERHEAD PUB PARKING DIST 1	0600128000000024000	2	Alley	0.023	1,002	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0		0	0	0	0	0	
	RIVERHEAD ENTERPRISES L P	0600128000000049002	3	SUSHI Place	0.058	2,526	2,067	0	0	0	2,067	2,021	2,021	2,021	2,021	2,021	10,106	1,769	1,769	707	177	4,421		1,769	1,769	442	111	4,090	
ANTHONY	MINAS	0600128000000035001	3	Commercial	0.027	1,176	1,176	945	0	0	2,121	941	941	941	941	941	4,704	1,176	1,176	845	0	3,198		1,176	1,176	845	0	3,198	
	SUFFOLK COUNTY INDUSTRIAL DEVELOPME	0600128000000066000	3	Institutional	0.478	20,845	17,442	8,721	0	0	26,163	16,692	16,692	16,692	16,692	16,692	83,461	17,442	8,721	0	0	26,163		17,442	8,721	0	0	26,163	
	108 EAST MAIN STREET ASSOCIATES	0600128000000067000	3	Commercial	0.150	6,534	2,465	2,465	881	0	5,292	5,227	5,227	5,227	5,227	5,227	26,136	2,465	2,465	881	0	5,292		2,465	2,465	881	0	5,292	
HARRY D	PARTH	0600128000000037001	3	DBA Q Store	0.095	3,066	2,582	0	0	0	2,582	2,405	2,405	2,405	2,405	2,405	12,025	2,104	2,104	842	210	5,260		2,104	2,104	526	131	4,865	
	BIMLANGE INC	0600128000000064001	3	Commercial	0.185	8,059	7,615	3,807	0	0	11,422	6,447	6,447	6,447	6,447	6,447	32,234	5,641	5,641	2,256	563	14,103		5,641	5,641	1,410	353	13,045	
	111 EAST MAIN STREET REALTY CORP	0600128000110000000	3	Vacant	0.120	5,458	5,114	0	0	0	5,114	4,286	4,286	4,286	4,286	4,286	21,430	3,751	3,751	1,500	375	9,376		3,751	3,751	938	234	8,675	
	ELECTRICAL MOTOR MAINTENANCE INC	0600128000000052002	3	Commercial	0.051	2,309	2,193	2,193	0	0	4,578	2,193	2,193	2,193	2,193	2,193	10,966	2,193	2,193	2,193	0	6,578		2,193	2,193	2,193	0	6,578	
JOSEPH	TALENTINO	0600128000000063002	3	Commercial	0.067	2,700	2,560	0	0	0	2,560	3,032	3,032	3,032	3,032	3,032	15,159	2,653	2,653	1,061	265	6,632		2,653	2,653	663	166	6,135	
	PAGE REALTY CO LLC	0600128000100000000	3	SUPPLY, Plumb	0.434	19,002	0,925	2,486	0	0	13,291	0,925	2,486	0	0	0	13,291	0,925	2,486	0	0	13,291		0,925	2,486	0	0	13,291	
	TRUSTCO REALTY	0600128000100000000	3	Facility, Gov	0.220	12,720	2,199	2,199	0,662	0	6,660	2,199	2,199	0,662	0	0	6,660	2,199	2,199	0,662	0	6,660		2,199	2,199	0,662	0	6,660	
	CHRIST CONGREGATIONAL CHURCH SOCIETY	0600128000000065000	3	Institutional	0.448	19,538	9,148	8,800	1,323	0	18,767	9,148	8,800	1,323	0	0	18,767	9,148	8,800	1,323	0	18,767		9,148	8,800	1,323	0	18,767	
	BR WOOLWORTH SITE LLC	0600128000100000002	3	WOOLWORTH	0.660	28,967	23,210	12,605	0	0	37,814	23,174	23,174	23,174	23,174	23,174	115,870	23,210	12,605			37,814		23,210	12,605			37,814	
	RIVERHEAD ENTERPRISES L P	0600128000000062002	3	Alley	0.057	2,483	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0		0	0	0	0	0	
	RIVERHEAD TOWN OF	0600128000000068001	3	Parking Lot	4.348	189,487	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0		0	0	0	0	0	
	VIVALARTE INC	0600128000000058001	3	Landscaped Area	0.053	2,309	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0		0	0	0	0	0	
		0600129001000040000	3	PARKING LOT	0.066	2,875	0	0	0	0	0	2,300	2,300	2,300	2,300	2,300	11,500	0	0	0	0	0		0	0	0	0	0	
	JPMORGAN CHASE BANK NATIONAL ASSOC	0600128000000000000	3	CHASE BANK	0.556	23,959	6,383	6,383	6,383	0	19,149	6,383	6,383	6,383	0	0	19,149	6,383	6,383	6,383	0	19,149		6,383	6,383	6,383	0	19,149	
	PLACE FOR LEARNING INC	0600128000300068002	8	Commercial	0.511	22,259	2,000	2,000	800	0	4,800	17,807	17,807	17,807	17,807	17,807	89,037	15,581	15,581	6,233	1,558	38,954		15,581	15,581	3,895	974	36,032	
ANTONIO	CALIM	0600128000300066000	8	Commercial	0.206	11,356	6,794	0	0	0	6,794	9,060	9,060	9,060	9,060	9,060	45,302	8,484	0	0	0	8,484		8,484	0	0	0	8,484	
	FRAIN LLC	0600129000100010000	9	Vacant	0.276	12,023	11,788	0	0	0	11,788	9,618	9,618	9,618	9,618	9,618	48,090	8,416	8,416	3,366	842	21,039		8,416	8,416	2,104	526	19,462	
	HONGO MANAGEMENT ASSOC INC	0600129000100030000	9	Vacant	0.276	12,023	10,735	0	0	0	10,735	9,618	9,618	9,618	9,618	9,618	48,090	8,416	8,416	3,366	842	21,039		8,416	8,416	2,104	526	19,462	
	RIVERHEAD TOWN OF	0600128000100001000	9	FIRE STATION	0.616	27,878	3,906	3,153	0,0	0	7,755	3,906	3,153	0,0	0	0	7,755	3,906	3,153	0,0	0	7,755		3,906	3,153	0,0	0	7,755	
ENTERPRISES	RIVERHEAD	0600129000100070000	9	Institutional, Gove*	0.682	29,708	16,755	0	0	0	16,755	23,766	23,766	23,766	23,766	23,766	118,832	20,796	20,796	8,318	2,080	51,989		20,796	20,796	5,199	1,300	48,090	
ENTERPRISES	RIVERHEAD	0600129000100070000	9	Institutional, Gove*	0.330	14,375	3,085	0	0	0	3,085	11,500	11,500	11,500	11,500	11,500	57,499	10,062	10,062	4,025	1,006	25,156		10,062	10,062	2,516	629	23,269	
ENTERPRISES	RIVERHEAD	0600129000100030000	9	Commercial	0.437	19,030	5,437	5,492	0	0	10,929	13,779	13,779	13,779	13,779	13,779	68,895	12,055	12,055	4,822	1,206	30,138		12,055	12,055	3,014	753	28,014	
	RIVERHEAD ENTERPRISES	0600128000100010000	9	Commercial	0.178	7,797	5,291	0	0	0	5,291	6,258	6,258	6,258	6,258	6,258	31,289	5,468	5,468	2,187	546	13,649		5,468	5,468	1,367	341	12,622	
ENTERPRISES	RIVERHEAD	0600128000100020000	9	Vacant	0.230	10,237	8,115	8,115	0	0	16,229	8,189	8,189	8,189	8,189	8,189	40,946	7,166	7,166	2,866	717	17,914		7,166	7,166	1,791	448	16,530	
ENTERPRISES	RIVERHEAD	0600129000100080000	9	Institutional, Gove*	0.192	11,848	6,885	0	0	0	6,885	9,479	9,479	9,479	9,479	9,479	47,394	8,294	8,294	3,318	829	20,735		8,294	8,294	2,073	518	19,176	
	KNIGHT TRUST	0600129000100020000	9	Institutional, Gove*	0.618	26,572	9,667	0	0	0	9,667	21,257	21,257	21,257	21,257	21,257	106,288	18,600	18,600	7,440	1,860	46,500		18,600	18,600	4,650	1,163	43,013	
ROBERT H	GAMMON	0600129000100022000	9	Mixed Use	0.250	10,890	5,256	2,102	0	0	7,358	8,712	8,712	8,712	8,712	8,712	43,560	7,623	7,623	3,049	762	19,058		7,623	7,623	1,906	476	17,628	
	RIVERHEAD TOWN OF	0600129000100050000	9	FIRE STATION	0.358	15,790	3,456	2,097	0	0	5,553	3,456	2,097	0	0	0	5,553	3,456	2,097	0	0	5,553		3,456	2,097	0	0	5,553	
ENTERPRISES	RIVERHEAD	0600129000100030000	9	Institutional, Gove*	0.176	5,289	5,794	0	0	0	5,794	4,991	4,991	4,991	4,991	4,991	21,954	4,817	4,817	1,927	481	9,635		4,817	4,817	1,927	481	9,635	
	FAIRCHILD VARILLA WHEMUSH HALL	0600128000000086000	9	Commercial	0.074	3,223	2,579	0,516	0,516	0	3,095	2,579	2,579	0,516	0	0	5,095	2,579	2,579	0,516	0	5,095		2,579	2,579	0,516	0	5,095	
	DOWNTOWN RIVERHEAD HOLDINGS LLC	0600128000000076001	9	Commercial	0.113	4,922	4,655	0	0	0	4,655	3,008	3,008	3,008	3,008	3,008	16,040	3,446	3,446	1,378	345	8,614		3,446	3,446	861	215	7,968	
	ACCOR INC	0600128000000070001	9	Commercial	0.047	2,047	2,096	2,096	909	0	4,980	1,638	1,638	1,638	1,638	1,638	8,189	1,433	1,433	573	143	3,583		1,433	1,433	358	90	3,314	
ELIZABETH A	STEGEL	0600128000000078001	9	Commercial	0.050	2,178	1,379	0	0	0	1,379	1,742	1,742	1,742	1,742	1,742	8,712	1,525	1,525	610	152	3,812		1,525	1,525	381	95	3,526	
CHRISTINE V	KOSSMAN	0600128000000073000	9	Commercial	0.100	4,356	4,005	0	0	0	4,005	3,485	3,485	3,485	3,485	3,485	17,424	3,049	3,049	1,220	305	7,623		3,049	3,049	762	191	7,051	
	DELLAS EAST MANAGEMENT LLC	0600128000000073001	9	Commercial	0.136	5,924	3,628	0	0	0	3,628	4,739	4,739	4,739	4,739	4,739	23,697	4,147	4,147	1,659	415	10,367		4,147	4,147	1,037	259	9,590	
	RIVERHEAD TOWN OF	0600128000000072002	9	ALLEY	0.073	3,180	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0		0	0	0	0	0	
	GOODNESS & MERCY INC	0600128000000076002	9	Commercial	0.100	4,356	4,296	0	0	0	4,296	3,485	3,485	3,485	3,485	3,485	17,424	3,049	3,049	1,220	305	7,623		3,049	3,049	762	191	7,051	
	RIVERHEAD ENTERPRISES	0600128000000074000	9	Commercial	0.162	7,057	6,525	6,525	0	0	13,051	5,645	5,645	5,645	5,645	5,645	28,227	4,940	4,940	1,976	494	12,349		4,940	4,940	1,235	309	11,492	
	PEACHES UNLIMITED INC	0600128000000000000	9	Commercial	0.055	2,396	2,001	2,001	2,001	0	6,274	1,917	1,917	1,917	1,917	1,917	9,583	2,001	2,001	2,001	0	6,274		2,001	2,001	2,001	0	6,274	

First Name	Last Name	Parcel Id	Super Block	Existing Land Use	Lot Area (Acres)	Lot Area (SF)	Existing Building					Full Build-out (Bldg. Cvrg. 80%, Impervious Cvrg. 100%, FAR 4.0)						Scenario - 2 3rd Floor - 40% of all buildings 4th Floor - 25% of 3rd floor buildings (Bldg. Cvrg. 70%, Impervious Cvrg. 90%, Max. 4 levels)						Scenario-3 3rd Floor - 25% of all buildings 4th Floor - 25% of 3rd floor buildings (Bldg. Cvrg. 70%, Impervious Cvrg. 80%, Max 4 levels)					
							1st Floor (SF)	2nd Floor (SF)	3rd Floor (SF)	4th Floor (SF)	Total (SF)	1st Floor (SF)	2nd Floor (SF)	3rd Floor (SF)	4th Floor (SF)	5th Floor (SF)	Total (SF)	1st Floor (SF)	2nd Floor (SF)	3rd Floor (SF)	4th Floor (SF)	Total (SF)	Notes	1st Floor (SF)	2nd Floor (SF)	3rd Floor (SF)	4th Floor (SF)	Total (SF)	Notes
	RMM I, P	0600128000000017001	9	Commercial	0.059	2,570	1,799	0	0	0	1,799	2,056	2,056	2,056	2,056	2,056	10,280	1,799	1,799	720	180	4,498		1,799	1,799	450	112	4,160	
	RIVERHEAD ENTERPRISES L.P.	0600128000000077000	9	Commercial	0.228	9,932	8,515	8,515	0	0	17,031	7,945	7,945	7,945	7,945	7,945	39,727	6,952	6,952	2,781	695	17,380		6,952	6,952	1,738	435	16,077	
	TAMPONS PRIVATE AVENUE LLC	0600128000000078000	9	Commercial	0.147	6,370	3,185	3,185	0	0	6,370	4,000	4,000	4,000	4,000	4,000	20,000	3,500	3,500	1,400	0	8,400		3,500	3,500	1,400	0	8,400	
	GARDEN PROPERTY GROUP INC/ONE RIVER ROAD	0600128000000080000	9	OTHER (NON PROFIT)	0.737	32,100	32,100	32,100	32,100	32,100	160,500	32,100	32,100	32,100	32,100	32,100	160,500	32,100	32,100	32,100	32,100	128,400		32,100	32,100	32,100	32,100	96,300	
	MAC COMMUNICATIONS INC	0600128000000075000	9	Commercial	0.095	2,304	2,031	0	0	0	2,031	1,917	1,917	1,917	1,917	1,917	9,583	1,677	1,677	671	168	4,193		1,677	1,677	419	105	3,878	
	COUNTRY LIMOUSINE SERVICE INC	0600128000000088000	9	Commercial	0.064	2,788	2,723	2,723	0	0	5,446	2,230	2,230	2,230	2,230	2,230	11,150	2,123	2,123	2,123	0	6,370		2,123	2,123	2,123	0	6,370	
	K CORELIN LLC	0600128000000078002	9	Commercial	0.029	1,263	955	955	0	0	1,910	1,161	1,161	1,161	1,161	1,161	5,805	884	884	354	88	2,211		884	884	221	55	2,045	
	TOWN OF RIVERHEAD	0600128000000072003	9	Parking Lot	0.259	11,282	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0		0	0	0	0	0	
	TOWN OF RIVERHEAD	0600128000000072004	9	Parking Lot	0.250	11,326	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0		0	0	0	0	0	
	TOWN OF RIVERHEAD	0600128000000072002	9	Driveway	0.008	337	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0		0	0	0	0	0	
	TOWN OF RIVERHEAD	0600128000000088000	9	Driveway	0.110	4,793	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0		0	0	0	0	0	
	TOWN OF RIVERHEAD	1266.86 7	9	Parking Lot	2.771	101,865	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0		0	0	0	0	0	
	TOWN OF RIVERHEAD		9	Parking Lot			0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0		0	0	0	0	0	
DAILY LIFE	STONER	0600128000000007000	10	Residential	0.110	4,922	1,969	492	0	0	2,461	3,938	3,938	3,938	3,938	3,938	19,688	3,446	3,446	1,378	345	8,615	Redevelopment	3,446	3,446	861	215	7,968	Redevelopment
CLIFFORD	SAUNDERS	0600128000000013001	10	Commercial	0.151	6,578	6,139	0	0	0	6,139	5,262	5,262	5,262	5,262	5,262	26,310	4,604	4,604	1,842	461	11,511		4,604	4,604	1,151	288	10,647	
	RIVERHEAD SEWER DISTRICT	0600128000000011000	10	Utilities	0.015	657	657	0	0	0	657	657	0	0	0	0	657	657	0	0	0	657		657	0	0	0	657	
JOAN	PASKL	0600128000000001000	10	Vacant	0.062	2,701	1,287	1,287	0	0	2,575	2,161	2,161	2,161	2,161	2,161	10,805	1,891	1,891	756	189	4,726		1,891	1,891	472	118	4,372	
	1400 MAIN ROAD REALTY CORP	0600128000000017000	10	Commercial	0.266	11,587	837	0	0	0	837	9,270	9,270	9,270	9,270	9,270	46,348	8,111	8,111	3,244	811	20,277		8,111	8,111	2,028	507	18,756	
	TOWN OF RIVERHEAD SEWER DISTRICT	0600128000000008000	10	Residential	0.115	4,922	1,162	581	0	0	1,743	1,162	581	0	0	0	1,743	1,162	581	0	0	1,743		1,162	581	0	0	1,743	
PHILIPC	HANCOCK	0600128000000015000	10	Residential	0.337	15,551	2,478	2,180	0	0	4,658	12,441	12,441	12,441	12,441	12,441	62,204	10,880	10,880	4,354	1,089	27,214		10,880	10,880	2,721	680	25,173	
	MIAMI MAX LLC	0600128000000030000	10	Commercial	0.192	8,364	6,164	0	0	0	6,164	6,691	6,691	6,691	6,691	6,691	33,454	5,854	5,854	2,342	585	14,636		5,854	5,854	1,464	366	13,538	
MARY	LONGO	0600128000000000001	10	Residential	0.108	2,069	1,486	586	0	0	2,072	7,248	7,248	7,248	7,248	7,248	36,242	6,342	6,342	2,537	634	15,850		6,342	6,342	1,586	396	14,667	
	SHOUT FOR THE MOON LLC	0600128000000010000	10	Multiuse	0.17	7,598	2,001	0	0	0	2,001	4,774	4,774	4,774	4,774	4,774	23,871	4,177	4,177	1,671	418	10,444		4,177	4,177	1,044	261	9,660	
DAWN DIRS	WILLIAMS	0600128000000000000	10	Residential	0.163	7,106	1,717	763	0	0	2,480	3,680	3,680	3,680	3,680	3,680	18,400	4,970	4,970	1,988	497	12,425		4,970	4,970	1,243	311	11,494	
WILLIAM	TEMERESCU	0600128000000018000	10	Commercial	0.193	11,196	3,410	0	0	0	3,410	9,165	9,165	9,165	9,165	9,165	45,825	8,019	8,019	3,208	802	20,048		8,019	8,019	2,005	501	18,525	
RAYMOND	CASTRONOVA	0600128000000015002	10	Multiuse	0.124	5,401	1,399	1,092	0	0	2,491	4,321	4,321	4,321	4,321	4,321	21,604	3,781	3,781	1,512	378	9,454		3,781	3,781	945	236	8,144	
	SAUNDERS FAMILY LIMITED PARTNERSHIP	0600128000000012000	10	Commercial	0.060	2,614	1,426	0	0	0	1,426	2,091	2,091	2,091	2,091	2,091	10,454	1,830	1,830	732	183	4,573		1,830	1,830	457	114	4,231	
ARMY	SALVATION	0600128000000013002	10	Commercial	0.408	16,950	7,357	0	0	0	7,357	12,824	12,824	12,824	12,824	12,824	64,120	11,221	11,221	4,488	1,122	28,053		11,221	11,221	2,805	701	25,948	
HAROLD T. JR.	RICHARD	0600128000000022000	10	Commercial	0.045	2,396	922	0	0	0	922	1,917	1,917	1,917	1,917	1,917	9,583	1,677	1,677	671	168	4,193		1,677	1,677	419	105	3,878	
ROBERT	CASTALDI	0600128000000010001	10	Multiuse	0.068	2,879	602	518	0	0	1,210	2,300	2,300	2,300	2,300	2,300	11,500	2,012	2,012	805	201	5,031		2,012	2,012	503	126	4,654	
	TOWN OF RIVERHEAD 004	1294-8-21.3	10	Injection/Cesspoolsr Co	6.160	267,408	72,300	28,000	28,000	28,000	156,300	72,300	28,000	28,000	28,000	0	156,300	72,300	28,000	28,000	28,000	156,300		72,300	28,000	28,000	28,000	156,300	
	TOWN OF RIVERHEAD		10	Parking Lot			0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0		0	0	0	0	0	
CLIFFORD	SAUNDERS	0600128000000010007	10	Driveway	0.048	2,091	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0		0	0	0	0	0	
		TOTAL:					473,180	206,454	84,030	30,240	800,103	617,880	340,465	317,525	408,674	490,455	1,642,516	542,893	438,168	195,054	70,146	1,246,127		347,889	458,168	146,843	55,404	1,198,366	

LEGEND:

Existing parking lots and/or alleys and/or properties owned by Town of Riverhead

Existing properties with historical significance and/or architectural value and properties recently developed and/or constructed and/or renovated

Existing development which are considered to stay as-is in Scenario-2 and Scenario-3 because of their current status

Note: There are four (4) parcels which are not entirely within DC-5 district and are shown in earlier.

The alternative development scenarios (Scenario-2 & -3) were prepared with build assumptions that are more realistic in terms of current market conditions and a reasonable development to occur within the next ten years - thus the maximum density under these scenarios has been reduced. The following reduced bulk regulations were assumed:

Maximum Building Coverage:	70%
Maximum Impervious Coverage:	90%
Maximum Building Height:	4 Stories
Non-Residential Use:	Not permitted on 3rd and 4th stories
Off-Street Parking:	1 per apartment unit proposed

Such reduced bulk requirement would help the development of downtown evolve in a more organized pattern and would provide flexibility in design. It will provide space available for basic site needs such as wider sidewalks, space for entrance ways instead of "build to property line" scenarios. This would also promote landscaping and inclusion of pervious surfaces and would provide opportunities for public amenities and other features found in "form-based" codes. In addition to the reduced bulk requirements, following were assumed in terms of physical building mass:

Scenario 2: Maximum 40% of the buildings will have 3rd floor and only 25% of those buildings will have a 4th floor
Scenario 3: Maximum 25% of the buildings will have 3rd floor and only 25% of those buildings will have a 4th floor

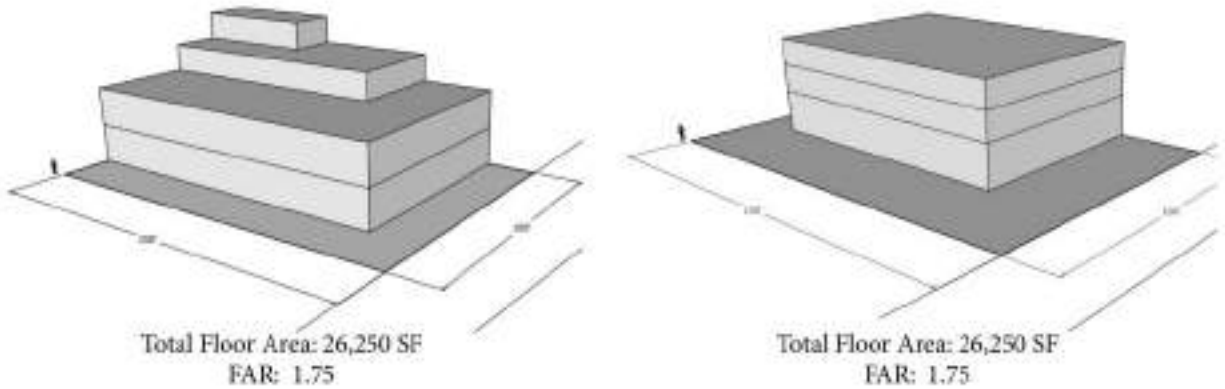
The resulting FAR based on the above criteria is:

	1st	*2nd*	*3rd*	*4th*	*Total*
Scenario 2:	0.70 +	0.70 +	(0.70x0.40) +	(0.70x0.40x0.25) =	**1.75**
Scenario 3:	0.70 +	0.70 +	(0.70x0.25) +	(0.70x0.25x0.25) =	**1.62**

The resulting FARs of 1.75 and 1.62 are critical in term of building massing and provides additional incentives to developers to reduce the building coverage and to limit the building height to 3 stories.[5] For example, instead of building a stacked 4 story structure with 70% building coverage for 1st & 2nd floors and further reduced coverage for 3rd and 4th floors, it may be preferable (being more cost effective) to construct a 3-story structure with a building coverage of 58.3% for all three floors. A comparison of building massing is illustrated in the **Figure 2** of same lot size and same FAR of 1.75. A four story structure is shown on the left with the 1st and 2nd floors occupying 70% of lot area and 3rd and 4th floors occupying 40% and 25% of lot area respectively. To the right the illustration shows a three-story structure with building coverage of 58.3%. This approach provides opportunities for innovative thinking for building massing which would result in reduced building footprints and at the same time providing opportunity for more open space within the downtown.

[5] A higher FAR can be achieved with the TDR process which is discussed in the later section of this report.

Figure 2
Building Massing Comparison (FAR 1.75)



As noted, during the process of generating alternative development scenarios, several parcels were excluded from the calculations including existing parking lots, alleys, structures with historic significance or architectural value, and properties where recent construction or renovation has occurred. In addition, a few additional parcels have been identified based on the current status of development and business stability and were excluded from alternative scenario calculation. Lastly, superblocks 4, 5, 6, and 7 were also excluded from alternative scenario calculation since these superblocks predominantly contain historic structures, institutional land uses or publicly owned properties. With these assumptions for reduced bulk requirements and building massing, the total floor area estimated for Scenario 2 and Scenario 3 are approximately 1.25 million SF and 1.19 million SF respectively.

The summary of alternative development scenario is provided in **Table 2** where the existing SF is then subtracted from the alternative development scenarios to calculate additional SF for each development scenario. The calculation shows an additional 1.84 million SF under the full build-out scenario, an additional 448,314 SF for Scenario-2, and an additional 390,553 SF for Scenario-3. The additional SF for each floor is also calculated and shown in the **Table 2**.

Table 2
Summary of DC-1 District Alternative Development Scenario

	Existing	**Full Build-out**		**Scenario-2**		**Scenario-3**	
		Total	**Additional**	**Total**	**Additional**	**Total**	**Additional**
Ground Level	471,089	617,819	146,730	547,859	76,769	547,859	76,769
Second Level	206,454	549,465	343,011	438,168	231,715	438,168	231,715
Third Level	84,030	517,125	433,095	193,054	109,024	146,845	62,815
Fourth Level	39,240	498,674	459,433	70,046	30,806	58,494	19,254
Fifth Level	0	459,433	459,433	0	0	0	0
TOTAL	800,813	2,642,516	**1,841,703**	1,249,127	**448,314**	1,191,366	**390,553**

The next step was to distribute this additional square footage of each of the development scenarios into specific land use categories to estimate impacts on public infrastructure as well as traffic and parking analyses and calculation of fiscal and economic impacts. The following were assumed for all three development scenarios:

- Ground level/First Floor: 90% of new additional SF would be retail and or restaurant and the remaining 10% would be office or other similar use;
- Second Floor: 20% of new additional SF would be office or other similar use and the remaining 80% would be residential;
- Third Floor and above: 100% would be residential; and
- For purpose of estimating the number of residential units, an average of 1,000 SF/ unit was assumed based on some of the recent developments within Riverhead downtown.

The land use distribution of additional square footage of each development scenario was calculated and is summarized in **Table 3**. Full build-out scenario, if built under the above assumptions would generate an additional 134,354 SF of retail & restaurant use, 84,285 SF of office & other similar uses, and 1,642 residential apartment units (not considering the cap of 500 residential units presently in the code). Scenario 2 would provide an additional 55,175 SF of retail & restaurant space, 52,146 SF of office & other similar uses, and 330 residential apartment units. Scenario-3 would provide an additional 55,175 SF of retail & restaurant space, 52,146 SF of office & other similar use, and 270 residential apartment units.

Table 3
Land Use Distribution of Additional SF under Build-Out Scenarios

	Total (Additional SF)	**Retail/ Restaurant (SF)**	**Office & Others (SF)**	**Apartments**	
				SF	**# of units**
Full Build-out					
Ground level 90% Retail & Restaurant; 10% Office/Others	146,730	132,057	14,673	0	0
Second level 20% Office/Others; 80% Residential	343,011	0	68,602	274,409	274
Upper levels 100% Residential	1,351,962	0	0	1,351,962	1,352
Total	1,841,703	**132,057**	**83,275**	1,626,371	**1,626**[6]

[6] The current zoning code cap limits a maximum of 500 apartment units within the downtown Riverhead. There are already a total of 70 apartment units in the downtown (52 units of Summerwind and 18 units in the former Woolworth building). This leaves a balance of 430 additional units that can still be constructed within the downtown. Therefore, out of 1,626 units shown in the table only 470 units would be permitted by current zoning. The remaining square footage equivalent to 1,156 apartments (1,626 – 470 = 1,156), or in floor area 1,156,000 SF could be used for non-residential purposes.

	Total (Additional SF)	Retail/ Restaurant (SF)	Office & Others (SF)	Apartments	
				SF	# of units
Scenario-2					
Ground level 90% Retail & Restaurant; 10% Office/Others	76,769	69,092	7,677	0	0
Second level 20% Office/Others; 80% Residential	231,715	0	46,343	185,372	185
Upper levels/3rd & 4th levels 100% Residential	139,830	0	0	139,830	140
Total	**448,314**	**69,092**	**54,020**	325,202	**325**
Scenario-3					
Ground level 90% Retail & Restaurant; 10% Office/Others	76,769	69,092	7,677	0	0
Second level 20% Office/Others; 80% Residential	231,715	0	46,343	185,372	185
Upper levels/3rd & 4th levels 100% Residential	82,069	0	0	82,069	82
Total	**390,353**	**69,092**	**54,020**	267,441	**267**

2. Alternative Development Scenarios for the BOA Study Area

Three alternative development scenarios were prepared for the entire BOA study area and are illustrated on **Figure 3 (also included as Plate 2)**. Each of the individual sites which were found to have highest potential for development or redevelopment has been identified on **Figure 3** and was provided with a Site ID. The Site ID is a code generated using an alphabetic letter followed by a numeric value. The alphabetic letter simply refers the subarea in which the site is located (Western: W; Central: C; Downtown: D; Eastern: E) and the following numeric value which indicates the count. For example, a site with Site ID of W3 refers to the third site located in western subarea.

It should be noted that each site does not necessarily represent a single parcel (some Site IDs include a combination of several parcels). Such combination of parcels is determined based on the development potential of the individual or multiple parcels. For example, Site D6 includes the entire DC-1 (Main Street) district which consists of 112 parcels.

Figure 3 (See also full size version as Plate 2)

Below is the description of each of the development alternative scenario and assumptions used for development of such alternative scenario:

Development Alternative 1: This development alternative is the same as the base conditions analysis used for the traffic impact analysis and "Transit Oriented Development (TOD) Growth Plan," a separate report prepared in conjunction with the BOA Nomination Study. Base conditions scenario is based upon existing conditions with 80% of vacant storefronts filled, plus accounting for projects which were either under construction during the May 2013 vehicular trip counts were recorded or for which the site development plans had been approved. **Table 4** provides a list of projects for which the development plans had been approved for either new construction or expansion and which were included in the baseline condition.

Table 4
List of Approved Project that were included in Baseline

Project	Description
Apollo	26,188 SF of Health Club, 6392 SF Furniture Store and 19 apartment units
Summerwind	200 seat restaurant, 52 apartment units and 2,590 SF Drive-in-Bank
Zenith	5,317 SF of retail space and 8 apartment units

Development Scenario 2: This development alternative assumes the most ideal development scenario on all of the proposed sites including the conceptual development sketches (i.e. Peconic Overlook, Grocery Concept, and Train Station) that were discussed previously in the report (**see Section 4 - Summary of Analysis and Recommendations**). Below are some of the key highlights of Development Alternative 2:

- Site W3: Redevelopment of 87 Lumber in to an approximately 10,000 SF visitor center with food court and rail spur for scoot train;
- Site C1: Redevelopment of properties located at the corner of Mill Road and Route-25 to Peconic Landing providing approximately 9,600 SF of retail, gift shops, restaurants, approximately 8,000 SF of bed and breakfast, and conversion of 3 existing residential homes to rental cottage;
- Site D1: Redevelopment of the train station block to a coordinated mixed-use development providing approximately 30,000 SF of retail and approximately 95 residential apartment units along with a 4 story parking garage providing approximately 882 parking spaces;
- Site D4: Redevelopment of a portion of the block between Griffing Ave and Osborn Ave to an approximately 14,000 SF Grocery Store and approximately 7,000 SF retail strip along with 2 story parking garage providing approximately 120 parking spaces;
- Site D6: Redevelopment of DC-1 District to Scenario 2 as described in previous section providing an additional 69,092 SF of retail and restaurant, approximately 54,020 SF of office/other similar use, and approximately 325 additional apartment units; and

- Site E3: Redevelopment of existing Auto Salvage (Gershow) into a multi-family development providing approximately 28 residential units. The existing site is approximately 5.9 acres and is zoned CRC (Commercial Residential Campus). FAR of 0.2 is permitted within this zone for a development without a public sewer. FAR of 0.2 would yield 51,400 SF of building floor area. Assuming 1,800 SF average size of a townhome, this site would yield approximately 28 townhomes.

All proposed development under this Scenario 2 is tabulated and presented in **Table 5** and should be reviewed in conjunction with **Figure 3** which indicates the location of individual sites. The purpose of this table is to indicate the estimated total new additional square footage for individual land uses. The figure indicated in italics represents the existing square footage to be removed. The table shows that a total of 123,302 SF of new retail/commercial space, 50,456 SF of restaurant space, 50,028 SF of office space, 28 new multi-family/townhouse units, 420 new apartments, 63 camp sites, 10,000 SF of public/quasi-public space, and 32,800 SF allocated for lodging (Bed & Breakfast). The table also shows removal of 24,419 SF of existing industrial space and five single-family homes.

Development Scenario 3: Development Scenario 3 is slightly different from Development Scenario 2. The major difference between this alternative and Development Scenario 2 is the level of development within the DC-1 district with specific alternatives outside of the Downtown area. Below are some of the key highlights of Development Scenario 3 which differ from Development Scenario 2:

- Site W3: Redevelopment of 87 Lumber to a multiplex/ IMax theater with food court;
- Site D1: Redevelopment of train station block to a multiplex with parking structure; and
- Site D6: Redevelopment of DC-1 District to Scenario-3 as described in previous section providing an additional 69,092 SF of retail and restaurant, approximately 54,020 SF of office/other similar use, and approximately 267 additional apartment units.

All development envisioned under this scenario is tabulated and presented in **Table 6.** The table shows that a total of 133,318 SF of new retail/commercial space, 40,546 SF of restaurant space, 65,868 SF of office space, 28 new multi-family/townhouse units, 267 new apartments, a 6-screen and a 10-screen multiplex, 8,000 SF Bed & Breakfast, and 5,100 SF of day care use. The table also shows removal of 24,419 SF of existing industrial space and five single-family homes.

Table 5
Alternative Development Scenario 2

Site ID	Retail/ Commercial (SF)	Restaurants/ Eating Places (SF)	Office (SF)	Industrial (SF)	Single-Family (No. of homes)	Multi-Family/ Townhomes (No. of Units)	Apartments (No. of Units)	Recreation	Miscellaneous	General Notes
W1	-	-	-	-	-	-	-	28 Camp Sites	13,500 SF B&B	
W2	-	-	-	-	-	-	-	-	-	
W3	-	-	-	-	-	-	-	10,000 SF Visitor Center with Scoot Train	-	Former 87 Lumber
W4	-	-	-	-	-	-	-	-	-	
W5	-	-	-	-	-	-	-	35 Camp Sites	18,500 SF B&B	
W6	16,899	-	-	*(-16,899)*	-	-	-	-	-	
W7	4,500	-	-	*(-4,300)*	-	-	-	-	-	
C1[a]	3,600 *(-8,481)*	6,000	-	-	*(-3)*	-	-	-	8,000 SF B&B	Peconic Overlook Concept
C2 & C8	20,000 *(-5,334)*	-	-	-	-	-	-	-	-	Former MOSF Site
C3	40,000	-	-	-	-	-	-	-	-	Blackman Plumbing
C4	6,000 *(-5,277)*	-	-	-	-	-	-	-	-	
C5	-	-	-	-	-	-	-	-	-	
C6	-	-	-	-	-	-	-	-	-	
C7	-	-	-	-	-	-	-	-	-	
D1[b]	10,000 *(-11,580)*	10,000	10,000 *(-4,286)*	-	*(-3)*	-	95	-	-	Train Station Block Coordinated Mixed Use Concept
D2[c]	-	-	-	-	-	-	-	-	-	Simple Table
D3	4,000	-	-	-	-	-	-	-	-	
D4	21,000 (-4,171)	-	*(-9,706)*	-	-	-	-	-	-	Grocery Concept
D5	-	-		-	-	-	-	-	-	
D6[d]	34,546	34,546	54,020	-	-	-	325	-	-	DC-1 District
E1	-	-	-	-	-	-	-	-	-	Vojvoda
E2	*(-2,400)*	-	-	-	1	-	-	-	-	Sap Enterprises
E3	-	-	-	*(-3,220)*	-	28	-	-	-	Auto Salvage
TOTAL	**123,302**	**50,546**	**50,028**	***(-24,419)***	***(-5)***	**28**	**420**	**See above**	**See above**	

Notes:

a. Please refer to Peconic Overlook concept sketch. 6,000 SF of total proposed 9,600 SF of commercial space is anticipated to be used for restaurants/ eating place:

b. Please refer to conceptual sketch of Train Station block. Out of proposed 30,000 SF of commercial space on ground floor, 1/3rd is anticipated to be used for restaurants/ eating places and 1/3rd i: anticipated to be used for and office space.

c. 2,400 SF Simple Table restaurant was included in the baseline scenario

d. Please refer to build-out scenario-2 for DC-1 District. Half of total 69,092 SF of ground floor retail/commercial space is anticipated to be developed for restaurants/ eating place:

All figures in *italics* represents existing square footage that is proposed to be removed

Table 6
Alternative Development Scenario 3

Site ID	Retail/ Commercial (SF)	Restaurants/ Eating Places (SF)	Office (SF)	Industrial (SF)	Single-Family (No. of homes)	Multi-Family/ Townhomes (No. of Units)	Apartments (No. of Units)	Recreation	Miscellaneous	General Notes
W1	-	-	-	-	6	-	-	-	-	
W2	-	-	-	-	-	-	-	-	-	
W3	-	-	-	-	-	-	-	6 Screen Multiplex (220 seats/ theatre) 36,000 SF	-	Former 87 Lumber
W4	-	-	-	-	-	-	-	-	-	
W5	-	-	-	-	5	-	-	-	-	
W6	16,899	-	-	*(-16,899)*	-	-	-	-	-	
W7	4,500	-	-	*(-4,300)*	-	-	-	-	-	
C1[a]	3,600 *(-8,481)*	6,000	-	-	*(-3)*	-	-	8,000 SF B&B	-	Peconic Overlook Concept
C2 & C8	20,000 *(-5,334)*	-	-	-	-	-	-	-	-	Former MOSF Site
C3	40,000	-	-	-	-	-	-	-	-	Blackman Plumbing
C4	-	-	-	-	-	-	-	-	-	
C5	-	-	-	-	-	-	-	-	-	
C6	-	-	-	-	-	-	-	-	-	
C7	-	-	-	-	-	-	-	-	-	
D1[b]	20,740 *(-11,580)*	-	25,840 *(-4,286)*	-	*(-3)*	-	-	10 Screen Multiplex 2,332 seats 43,576 SF	5,100 SF Day Care	Train Station Block Vintage Plan
D2[c]	-	-	-	-	-	-	-	-	-	Simple Table
D3	4,000	-	-	-	-	-	-	-	-	
D4	21,000 (-4,171)	-	*(-9,706)*	-	-	-	-	-	-	Grocery Concept
D5	-	-		-	-	-	-	-	-	
D6[d]	34,546	34,546	54,020	-	-	-	267	-	-	DC-1 District
E1	-	-	-	-	-	-	-	-	-	Vojvoda
E2	*(-2,400)*	-	-	-	-	-	-	-	-	Sap Enterprises
E3	-	-	-	*(-3,220)*	-	28	-	-	-	Auto Salvage
TOTAL	**133,318**	**40,546**	**65,868**	***(-24,419)***	**5**	**28**	**267**	**See above**	**See above**	

Notes:

a. Please refer to Peconic Overlook concept sketch. 6,000 SF of total proposed 9,600 SF of commercial space is anticipated to be used for restaurants/ eating place:

b. Please refer to Vintage Plan.

c. 2,400 SF Simple Table restaurant was included in the baseline scenario

d. Please refer to build-out scenario-2 for DC-1 District. Half of total 69,092 SF of ground floor retail/commercial space is anticipated to be developed for restaurants/ eating place:

All figures in *italics* represents existing square footage that is proposed to be removed

3. Comparative Analysis of Alternative Development Scenarios

Traffic Mitigations of Alternative Development Scenario: Alternative Development Scenario 2 is analyzed in **Section 3** in the Traffic Impact Analysis prepared by Nelson & Pope. This Development Scenario (Scenario 2) represents higher intensity development than Development Scenario 3, therefore the TOD Growth Plan focuses on analysis of Scenario 2 rather than Scenario 3. The congestion at Peconic/Roanoke and Main Street is considered a main obstacle to redevelopment and revitalization of the downtown area.

Parking Mitigation of Alternative Development Scenario: The parking analysis presented in **Section 3** excerpted from the TOD Growth Plan focuses on the Riverhead Downtown Area. Various factors are considered in the parking analysis including the weekday and weekend parking demand and standard code parking requirement along with parking guidance from ITE Parking Generation Manual 4th Edition. The parking analysis finds that under the Development Scenario 2, an additional 1,197 parking spaces will be required to meet the future parking demand. It is indicated that a parking structure will need to be erected to provide 1,197 additional parking spaces. The best location suggested for this structure is Lot L, located along north side of Est Main Street between Roanoke Ave and East Ave, since it is centrally located in the downtown area.

Economic Impacts of Alternative Development Scenarios:
It is expected that the construction under the implementation of either of the alternative development scenarios would contribute positively to the local economy. During the construction period, opportunities for employment would offer direct, indirect and induced benefits among businesses and households located throughout the region. During the operation of the new establishments, long term jobs would also offer direct, indirect and induced benefits to the Town of Riverhead, Suffolk County and the region as a whole. The new jobs created during both construction and long-term operations would help to increase business and household income in the community. In turn, as spending increases, this creates additional jobs and further increases business and household income throughout the Town and into other parts of the region.

A full economic analysis was completed to evaluate the benefits related construction and operations under Alternative Development Scenario 2 (as the higher intensity development scenario) and the results are included as **Appendix I-2**. The basic findings of the analysis are presented below.

During the construction period, *output* refers to the investment, or total costs associated with the construction that would result from the implementation of Alternative Development Scenario 2. The theoretical construction period is projected to represent a total of over $188.5 million in investment.[7] This output includes construction and land development costs associated with the development of the proposed project. The $188.5 million in direct output is projected to

[7] For the purpose of this analysis, this figure and all other figures in this section reflect 2016 dollars, the year in which construction is assumed to commence. Consequently, the projected economic impact is a conservative estimate as construction is assumed to occur over a 3-year period.

generate an indirect impact of over $68.9 million, and an induced impact of over $85.7 million, bringing the total economic impact on output to over $343 million during the three-year long construction period.

At full operation, direct output refers to the total revenues derived from the annual operation of the buildings constructed under Alternative Development Scenario 2. This includes revenue generated in the form of monthly rent for the residential units, annual leases from the commercial space, selling prices for the townhouse units, and sales revenues from the commercial space. Total output is estimated to total $96.3 million per year. The $96.3 million in direct operational revenues are projected to generate an indirect impact of over $19 million and an induced impact of over $20 million per year. This additional output is generated through round-by-round sales made at various merchants in other sectors of the regional economy. These include local retailers, service providers, banks, grocers, restaurants, financial institutions, insurance companies, health and legal services providers, and other establishments in the region. The sum of the direct, indirect and induced impacts results in a total economic impact on output of over $103 million during annual operations.

4. Evaluation of Residential Units in Downtown Riverhead

The Town of Riverhead Zoning Code[8] includes a limit on the total number of residential units permitted in DC-1 Zoning District. It states "upon the issuance of certificates of occupancy for 500 residential units, such residential units as set forth in §108-298(A)(12) shall be prohibited within the DC-1 Zoning Use District." Based upon discussions with Town planning staff, there was no empirical study conducted to justify the need or potential future demand for 500 residential units within the DC-1 district.[9] The purpose of this section is to evaluate the number of residential apartment units that may be feasible in downtown Riverhead in the coming years and identify mitigation that would be required to support the additional units.

As discussed in the previous section, the alternative development scenarios for the DC-1 District provide different yields for additional number of residential apartment units. The full build-out could yield an additional 1,642 units, Scenario 2 yields 330 additional units, and Scenario 3 yields 270 additional units. The total number of apartment units within Downtown DC-1 District and surrounding areas including new and approved projects is provided in **Table 7**.

---

[8] Section 108-298(A)

[9] The Town of Riverhead Comprehensive Plan included a build-out analysis for residential districts for Transfer of Development Rights (TDR) for the Agricultural Protection Zone (APZ) and concluded that 23,800 total units are possible under the existing zoning and 19,000 units are possible under the proposed zoning with implementation of the TDR Program - however, there was no specific analysis regarding how many residential units could be accommodated in the Downtown. It is further noted that the Urban Renewal Plan and Generic Environmental Impact Statement utilized this cap in the analysis which found that improvements, such as structured parking, would be required if the full build out, including 500 total residential units, were constructed.

Table 7
Total Residential Apartment Units in
Riverhead Downtown DC-1 District & Surrounding Area

	Full Build-out	Scenario-2	Scenario-3
Existing			
Summerwind	52	52	52
Former Woolworth Building	18	18	18
Development Scenarios (additional units)			
DC-1 District	1,626	325	267
Train Station Block	-	95	-
TOTAL	**1,696**[10]	**490**	**337**

Without consideration of the cap of 500 units, the total number of residential apartment units under full build-out would yield 1,712 units. It should be noted here that the full build-out development scenario was generated based on current code provision which also does not require off-street parking.[11] While it would be impractical to construct this number of residential units in the DC-1 District without the addition of structured parking and other investments such as significant public transit improvements, the full yield build-out is provided to show the maximum that could be proposed under the current zoning regulations (except for the cap) for comparison. It is provided merely to illustrate the flexibility of the DC-1 Code so that the impacts of such build-out can be avoided through modifications to the code which are recommended herein.

The total number of residential apartment units under Scenario 2 and Scenario 3 are 495 and 340 respectively. Scenario 2 also includes 95 residential units envisioned in the train station block (**see Section 4 - Summary of Analysis and Recommendations**), since the distribution of residential units as part of a mixed use development in this area of the Town would reinvigorate this block. Also, it is assumed that both of these alternative development scenarios would require 1 off-street parking stall for every apartment unit. Such requirement provides a practical approach for residential development where off-street parking would increase the marketing potential of apartment units. In addition, such a model would work very well in cases where properties are within a floodplain and where the ground level can be set aside for parking and apartment units could be constructed on upper levels.

Based on the above, it appears that Scenario 2 and Scenario 3 would provide for an appropriate number of apartment units consistent with Town goals that can be supported within the Downtown Riverhead and in the surrounding vicinity as long as the cap of 500 units is expanded beyond DC-1 District to surrounding areas including train station block.

[10] The current zoning cap limits a maximum of 500 apartment units within the downtown Riverhead. The 1,696 units shown in the table above is only for comparison purposes.
[11] The entire DC-1 district is located within the parking district where parking requirement is waived for any development located within the parking district.

5. Sustainable Development Density Bonus

Sustainability promotes development practices that result in buildings that are healthier to occupy, less expensive to operate and more responsible to the environment than traditional buildings. Sustainable developments designed on the principles established by LEED[12] are encouraged through the bonus density incentive program.

Leadership in Energy and Environmental Design (LEED) is a rating system that measures the design, construction and operation of high performance green buildings, homes and neighborhoods. LEED was developed by the U.S. Green Building Council (USGBC) to guide the building industry and provide standards for sustainability for a variety of building projects.

In LEED certification scoring, there are 136 possible base points distributed across five major credit categories: Sustainable Sites, Water Efficiency, Energy and Atmosphere, Materials and Resources, Indoor Environmental Quality, plus an additional 6 points for Innovation in Design and an additional 4 points for Regional Priority. Buildings can qualify for four levels of certification:

- Certified: 40–49 points
- Silver: 50–59 points
- Gold: 60–79 points
- Platinum: 80 points and above

The Long Island Regional Planning Council (LIRPC) prepared and published a plan dated December 2010 entitled "Long Island 2035 Regional Comprehensive Sustainability Plan." This plan identified pressing issues challenging the region and need to enhance environment, transportation, energy infrastructure, and protection of natural resources. The environmental and infrastructure challenges listed in the plan covers overuse of water in Long Island and potential threat of aquifer contamination and over-pumping, lack of strategic planning for sewer and inadequate sewer provisions in Suffolk County, very high energy cost, global warming and vulnerability to sea level rise, and lack of viable transportation alternatives. This plan recommends innumerable sustainability strategies including water conservation, energy conservation, protection of natural resources, and provides means to implement these strategies at regional scale through creation of governing body and also provides mechanism for potential funding for such projects.

A discussion regarding water quality found in **Section 3.2.9** of this report provides details regarding water quality issues within Peconic River and Estuary. The estimated pathogen load to

---

[12] LEED is a voluntary, market driven, consensus-based tool that serves as a guideline and assessment mechanism. LEED rating systems address commercial, institutional, and residential buildings and neighborhood developments. LEED seeks to optimize the use of natural resources, promote regenerative and restorative strategies, maximize the positive and minimize the negative environmental and human health consequences of the construction industry, and provide high-quality indoor environments for building occupants. LEED emphasizes integrative design, integration of existing technology, and state-of-the-art strategies to advance expertise in green building and transform professional practice. The technical basis for LEED strikes a balance between requiring today's best practices and encouraging leadership strategies. LEED sets a challenging yet achievable set of benchmarks that define green building for interior spaces, entire structures, and whole neighborhoods.

Flander's Bay was 773,119 billion Fecal Coliform per year (FC/yr). The TMDL recommended a reduction goal of 74% for Flander's Bay, which, if achieved, would result in 547,600 billion fewer FC/yr entering the waterbody. Similarly, Flanders Bay is included in the Nitrogen TMDL for Peconic Bay. The estimated daily load allocation of Total Nitrogen (TN) into the bay ranged from 620 to 644 lbs/day, while the maximum daily allocation ranged from 2,298 to 3,265 lbs/day. A 37% reduction goal for average daily TN input was allocated for Flanders Bay, while a maximum reduction goal of 32.5% was allocated in the TMDL.

The implication for redevelopment and recommendations related to water quality recommends the additional need for actions beyond the MS4[13] requirements to reduce nitrogen and pathogen inputs to the Peconic River. Use of low-impact development techniques for new development and redevelopment projects are recommended including green storm water infrastructure (such as bio-retention areas and rain gardens) use of permeable pavers or other pervious surfaces, provision of natural buffers, particularly in areas proximate to wetlands, use of green roofs, use of native species in landscaping, and limiting the use of fertilizer dependent vegetation on sites.

Local and regional environmental challenges are also considered for bonus density criteria. This section provides a possible framework for recommended bonus density criteria which is provided in **Table 8**. Bonus density criteria Type I and Type II are specifically provided for projects which do not intend to seek LEED certification but that provide sustainable approaches that are significant to improving the local and regional environment. Bonus density criteria Type I and II specifically deal with the water efficiency and the reduction of potable water use for sewage conveyance. Bonus density criteria Type III is LEED Certification[14] which includes bonus density criteria Type I and Type II. Bonus density criteria Type IV, V, VI are for higher LEED standards, LEED Silver, LEED Gold, and LEED Platinum respectively. These criterion are set up such that any project can have either Type I, or Type II or Type III or Type IV or Type V or Type VI. The bonus density is incremental based upon the difficulty level (and commensurate additional investment required on the part of the applicant) from one level to the next. Bonus density criteria Type VI is at the increment of an additional 40% as compared to Type V because of the 20 point difference between the Gold and Platinum LEED levels. The resulting FAR calculation in **Table 8** is provided only for DC-1 (Main Street) district, however, the same may be applied to other zoning districts, as applicable, based on the percent increment as indicated in the table.

The applicable zoning districts for the bonus density criteria are also provided in the **Table 8**. As envisioned, Type I and Type II can be achieved on any type of development including residential. Type III, IV, V, and VI are geared towards a downtown with alternative means of transportation such as commuter rail, light rail or subway station. Therefore, these bonus densities are only applicable to the DC-1, DC-2, DC-3, DC-4, and DC-5 districts.

---

[13] The NYSDEC MS4 (Municipal Separate Storm Systems) General Permit 0-10-002 lists Flanders Bay as being located within a Pathogen Impaired Watershed and a Nitrogen Impaired Watershed. This permit requires a 98% pathogen load reduction and a 15% nitrogen load reduction by March 9, 2021.

[14] There are 40-49 points that a project must achieve for LEED Certification. Water conservation and reduction of portable water use for building sewage conveyance are part of LEED Certification.

Recommended minimum development criteria are also indicated in **Table 8** for the types of projects that will be able to take advantage of bonus density criterions. The minimum development criteria for bonus density Type I, and II is noted as minimum of 1,000 SF of gross floor area within a permanent structure. For bonus density criteria Type III, IV, V, and VI, Minimum Program Requirements as established by LEED is recommended. LEED minimum program requirements are provided as **Appendix I-3**.

Table 8
Recommended Bonus Density Criteria

Type[15]	Recommended Base FAR in DC-1 District	Bonus Density Increment	Resulting FAR in DC-1 district	Applicable Zoning Districts	Minimum Development Criteria
Type I. Increase water efficiency within buildings to use 20% less water than the baseline (not including irrigation)	1.75	15%	2.0	All Zoning Districts	Minimum 1,000 SF of gross floor area within a building
Type II. Reduce portable water use for building sewage conveyance by 50% through the use of water-conserving fixtures or use of non-portable water (captured rainwater, recycled graywater)	1.75	30%	2.3	All Zoning Districts	Minimum 1,000 SF of gross floor area within a building
Type III. LEED Certification (40-49 points) (includes bonus density Type I and Type II)	1.75	60%	2.8	DC-1; DC-2, DC-3, DC-4, & DC-5 Districts	"Minimum Program Requirements" as established by LEED
Type IV. LEED Silver Certification (50-59 points)	1.75	80%	3.2	DC-1; DC-2, DC-3, DC-4, & DC-5 Districts	"Minimum Program Requirements" as established by LEED
Type V. LEED Gold Certification (60-79 points)	1.75	100%	3.5	DC-1; DC-2, DC-3, DC-4, & DC-5 Districts	"Minimum Program Requirements" as established by LEED
Type VI. LEED Platinum Certification (80+ points)	1.75	140%	4.2	DC-1; DC-2, DC-3, DC-4, & DC-5 Districts	"Minimum Program Requirements" as established by LEED

[15] Refer to LEED standards for Major Construction and Renovations. Type I and Type II baseline calculation should reference the standards used in LEED for Major Construction and Renovations.

6. Potential New Transfer of Development Rights (TDR) Program

The purpose of this section is to evaluate the feasibility of a new TDR program that can be established such that the properties within the Recreational Area of the WSRR, primarily along the south side of West Main Street (NYS Route 25), can be preserved and put into passive public use for enjoyment of the Peconic River with the development rights utilized to increase density within the DC-1 District. As noted previously, the Town Comprehensive Plan, in the recommendations for the DC-1 District, envisioned use of the Town's TDR program to allow additional density (FAR of 5.0) in the DC-1 District. However, the recommendation was not implemented, though the ability to increase allowable density was delegated to the Town Board by special permit.

Under the DEC WSRR regulations, land use within the "recreation" designation is generally restricted to residential single family homes with a minimum density of 1 unit for every 2 acres as well as limited river oriented recreational and commercial activities.

NP&V's initial analysis included an evaluation of transferring development density from the properties located along south side West Main Street (properties that are proposed to remain in the recreational designation) to the properties identified to be reclassified as 'community' - which are generally located along the north side of NYS Route 25. This initial analysis revealed that this approach may not be realistic, since many of the existing properties located along north side of NYS Route 25 are already built-out and exceed the density permitted by the current zoning regulation and the density permitted by DEC regulations of "community" class. It is expected that there are a number of properties which would benefit marginally from the opportunity to apply TDR to community parcels and it is recommended that the option be considered to encourage redevelopment where additional density is feasible. However, this increase in density would not be expected to yield a significant preservation of greenway properties along the south side of West Main Street and thus, the next logical step was to consider the feasibility and appropriateness of a new TDR program to allow transferring development density to Riverhead Downtown, especially to the DC-1 District (or to the Train Station Block if redeveloped with mixed use to include residential units in the future).

A follow up study to establish such a TDR program is recommended that would in effect remove density from the south side of NYS Route 25, and increase the density in DC-1 district. This program would need to ensure that it is equitable and even advantageous to transfer density from "sending parcels" to "receiving parcels." Such a program could situate development more appropriately, and potentially assist with revitalization of this corridor in a prescribed manner. The program would also provide environmental benefits such as great open space in the more sensitive areas of the corridor, and improved methods for handling sanitary waste with discharges farther from the river.

A TDR program is complex in that it must be enabled by Town zoning, and be consistent with comprehensive planning goals, but must also consider the myriad of additional regulations (Suffolk County Sanitary Code, WSRR, wetlands protection laws, flood plain development considerations and so on), while still providing a framework to provide economic viability and incentives to induce landowners to participate.

7. Key Recommendations

- Amend DC-1 district regulations to reduce bulk criteria similar to:
    - Maximum building coverage: 70%
    - Maximum lot coverage: 90%
    - Maximum FAR without Density Bonuses: 1.75
    - Maximum No. of Stories: 4

- Prohibit non-residential uses on 3rd and 4th levels in the Downtown Districts. Require one off-street parking per residential apartment unit irrespective of the project location (whether or not the property is located within the parking district).

- Continue to limit residential apartment to 500 maximum units, however, expand the geographical limitation to a wider area to include DC-3 District.

- Incentivize sustainable development within Downtown zones through bonus density criteria to achieve the maximum density that is permitted currently under the code. Provide special consideration to local and regional environmental challenges dealing with water quality issues.

- Establish a Transfer of Development (TDR) program to preserve properties along south side of Main Street by transferring development density to parcels within the DC-1 District (or to the Train Station Block if redeveloped with mixed use to include residential units).

APPENDIX I-2

Analysis of Alternative Development Scenario 2

Economic Impact Analysis

Appendix I-2
ANALYSIS OF ALTERNATIVE DEVELOPMENT SCENARIO 2
ANTICIPATED ECONOMIC BENEFITS

This section provides an analysis of the economic benefits of redevelopment under the higher density alternative development scenario (#2) developed as part of the BOA Nomination Study. Several of the components of the redevelopment scenario would require changes in zoning or use of other planning tools, such as floating zones or application of a transfer of development rights program which would need to be established. The majority of the build-out envisioned can be achieved under the current zoning - or in the case of the properties along West Main Street in the Recreational Area of the WSRR, following a change to the Community Designation[1].

1.1 Methodology

Various data and information from state and local sources was used to analyze the economic impacts stemming from the realization of the alternative development scenario.

The Alternative Development Scenario was developed utilizing input from the community and through an analysis of build out of the DC-1 District during the next decade. Several key redevelopment options were explored throughout the study area, including two block redevelopments that required aggregating numerous parcels (Peconic Overlook on West Main Street and the redevelopment of the railroad station block), both recognized as key strategic sites.

R.S. Means was referenced for information regarding square foot construction costs for various uses. These costs per square foot were utilized for the purpose of estimating construction costs, and the direct, indirect and induced economic impacts resulting from the construction period.

Local data was referenced pertaining to an average leasing rate for commercial space[2], sales price for condominium units, and market rents for 1-bedroom units and 2-bedroom units. These values were utilized for the purpose of estimating direct, indirect and induced economic impacts resulting from annual operations.

New York State Department of Labor publishes the Occupational Employment Statistics survey, and the Quarterly Census of Employment and Wages. This survey was used to estimate the wages earned among those employed within construction and extraction occupations in the Long Island region, as well as the wages earned within various industries during the long-term operations of the Development Scenario. These wages were assumed for each of the employees during the construction and operations of the Alternative Development Scenario.

Minnesota IMPLAN Group developed an economic impact modeling system known as IMPLAN, short for "impact analysis for planning". The program was developed in the 1970s through the United States Department of Agriculture's Forest Service, and was privatized in 1993. IMPLAN is built on a mathematical input-output (I-O) model to express relationships between various

[1] Zoning modifications would be required to allow additional density and mix of development envisioned for the train station block and two sites on Hubbard Avenue.
[2] Interview with real estate professional in Riverhead and Town Executive Director of Community Development.

sectors of the economy in a specific geographic location. The I-O model assumes fixed relationships between producers and their suppliers based on demand, and the inter-industry relationships within a region largely determine how that economy will respond to change. In an I-O model, the increase in demand for a certain product or service causes a multiplier effect; increased demand for a product affects the producer of the product, the producer's employees, the producer's suppliers, the supplier's employees, and so on, ultimately generating a total impact in the economy that is greater than the initial change in demand.

The IMPLAN model is a method for estimating local economic multipliers, including those pertaining to production, value-added, employment, wage and supplier data. IMPLAN differentiates in its software and data sets between 440 sectors that are recognized by the United States Department of Commerce. Multipliers are available for all states, counties and zip codes, and are derived from production, employment and trade data from sources including the United States Census Bureau, County Business Patterns, Annual Survey of Government Employment, Annual Survey of Retail Trade; United States Bureau of Labor Statistics, Quarterly Census of Employment and Wages, Consumer Expenditure Survey; United States Department of Labor; Office of Management and Budget; United States Department of Commerce; Internal Revenue Service; United States Department of Agriculture, National Agricultural Statistical Service; Federal Procurement Data Center; and United States Bureau of Economic Analysis, Regional Economic Information System, Survey of Current Business, among other national, regional, state and local data sources. IMPLAN generates output related to direct, indirect and induced impacts of construction and operation of development scenario. (A *direct impact* arises from the first round of buying and selling. These direct impacts can be used to identify additional rounds of buying and selling for other sectors of the economy and to identify the impact of spending by local households. An *indirect impact* refers to the increase in sales of other industry sectors, which include further round-by-round sales. An *induced impact* accounts for the changes in output and labor income by those employed within the region, resulting from direct and indirect impacts. The *total impact* is the sum of the direct, indirect and induced impacts).

IMPLAN is widely accepted as the industry standard for estimating how much a one-time or sustained increase in economic activity in a particular region will be supplied by industries located in the region. Federal government agencies such as the Army Corps of Engineers, Bureau of Economic Analysis, Bureau of Land Management, Environmental Protection Agency, Federal Reserve Bank, Fish and Wildlife Service, and National Park Service have used the multipliers to study the local impact of government regulation on specific industries and to assess the local economic impacts of Federal actions. State and local governments including New York State Department of Labor, New York State Division of the Budget, New York State Office of the State Comptroller, New York State Assembly and New York City Economic Development Corporation, have used the multipliers to estimate the regional economic impacts of government policies and projects and of events, such as the location of new businesses within their state, or to assess the impacts of tourism. Likewise, businesses, universities and private consultants have used the multipliers to estimate the economic impacts of a wide range of projects, such as building a new sports facility or expanding an airport; of natural disasters; of student spending; or of special events, such as national political conventions. NP&V personnel have received formal IMPLAN training through the Minnesota Implan Group, and possess the qualifications to project economic

impacts for a multitude of project types using this software. For the purpose of this analysis, multipliers specific to socio-economic data in Suffolk County were purchased and analyzed to determine the direct, indirect and induced economic impacts during both the short-term construction period and during annual operations of the Alternative Development Scenario.

Economic Impact Analysis

It is expected that the construction under the alternative development scenario would contribute positively to the local economy. During the construction period, opportunities for employment would offer direct, indirect and induced benefits among businesses and households located throughout the region. During the operation of the new establishments, long term jobs would also offer direct, indirect and induced benefits to the Town of Riverhead, Suffolk County and the region as a whole. The new jobs created during both construction and long-term operations would help to increase business and household income in the community. In turn, as spending increases, this creates additional jobs and further increases business and household income throughout the Town and into other parts of the region.

1.2 Economic Impacts of Construction

For the purpose of this analysis it was assumed that the redevelopment scenario will commence in 2015, with an accelerated construction period occurring over a period of four years. This section describes the economic impacts/benefits of the full construction of Alternative Development Scenario 2, including a detailed analysis of direct, indirect and induced impacts generated during the construction period. It is important to note that each of these impacts (benefits) are temporary and are projected to occur only while the construction is occurring. Economic impacts generated during operations; however, are permanent and on-going and they are projected on an annual basis, assuming continued stabilized operations. A detailed analysis of direct, indirect and induced impacts during annual operations is described in the following section.

During the construction period, *output* refers to the investment, or total costs associated with the construction that would result from the implementation of the Development Scenario. The construction period is projected to represent a total of over $188.5 million in investment.[3] This output includes construction and land development costs associated with the development of the proposed project.[4] The $188.5 million in direct output is projected to generate an indirect impact of over $68.9 million, and an induced impact of over $85.7 million, bringing the total economic

[3] For the purpose of this analysis, this figure and all other figures in this section reflect 2016 dollars, the year in which construction is assumed to commence. Consequently, the projected economic impact is a conservative estimate as construction is assumed to occur over a 3-year period.

[4] Construction costs estimated by R.S. Means, *"Square Foot Costs"*, 35th Edition, 2014. These estimates reflect construction costs of $273.34/SF for restaurant use; $166.31/SF for other retail use; $221.43/SF for office use; $156.19/SF for townhomes; $204.79/SF for multi-family residential use; $98.13/SF for parking facilities; and $100,000/acre for site work. No value was inputted for improvements related to sewer, water and other infrastructure. The construction costs reflect a 21% premium to account for inflated construction costs, specific to construction proximate to Suffolk County (Riverhead), New York. It is important to note that all costs are estimates based upon market conditions as of the date of preparation of this analysis.

impact on output to over $343 million during the three-year long construction period.[5] A summary of the top industries affected during the construction period, sorted by the total impact on output is provided in **Table 1.**

TABLE 1
TOP FIVE INDUSTRIES AFFECTED DURING CONSTRUCTION PERIOD, BY TOTAL IMPACT ON OUTPUT

Sector	Description	Employment (Number of Jobs)	Labor Income (Wages)	Output (Revenue)
60	Construction of new multifamily residential structures	309.7	$60,317,879	$120,635,750
57	Construction of new commercial structures, including farm structures	139.9	$27,240,483	$45,400,803
56	Construction of new highways and streets	45.9	$8,943,004	$22,607,509
441	Owner-occupied dwellings	0	$0	$12,551,389
407	Retail - Nonstore retailers	71.3	$2,910,466	$10,438,148

Source: Analysis by Nelson, Pope & Voorhis, LLC, via IMPLAN software.

During the construction period, direct *employment* refers to the number of short-term jobs necessary to build the Development Scenario. It is projected that the construction period will necessitate 495.5 full time equivalent (FTE) employees annually over the theoretical 3-year construction period.

Direct employment creates additional opportunities for job creation throughout other sectors of the economy through expenditures derived from labor income and output. As such, the 495.5 FTE jobs created annually during the construction period will have an indirect impact of 517.5 FTE employees and an induced impact of 606.7 FTE employees in other industry sectors, bringing the total impact of construction to 1,619.7 FTE jobs during the construction period.[6] This job creation – direct, as well as indirect and induced – is most crucial during Long Island's economic long term recovery, and presents significant opportunities for the thousands of persons who are unemployed throughout the region. A summary of the top industries affected during the construction period, sorted by the total impact on employment is provided in **Table 2**.

[5] According to IMPLAN, a multiplier of 1.837293 represents the total dollar change in output that occurs in all industries for each additional dollar of output delivered to final demand through the "Construction of new multifamily residential structures" (IMPLAN Sector 60) in Suffolk County, New York; a multiplier of 1.592125 represents the total dollar change in output that occurs in all industries for each additional dollar of output delivered to final demand through the "Construction of new commercial structures, including farm structures" (IMPLAN Sector 57) in Suffolk County, New York; a multiplier of 1.628745represents the total dollar change in output that occurs in all industries for each additional dollar of output delivered to final demand through the "Construction of new highways and streets" (IMPLAN Sector 56) in Suffolk County, New York.

[6] According to IMPLAN, a multiplier of 11.741229 represents the total change in the number of jobs that occurs in all industries for each additional one million dollars of output delivered to final demand through the "Construction of new multifamily residential structures" (IMPLAN Sector 60) in Suffolk County, New York; a multiplier of 10.463298 represents the total change in the number of jobs that occurs in all industries for each additional one million dollars of output delivered to final demand through the "Construction of new commercial structures, including farm structures" (IMPLAN Sector 57) in Suffolk County, New York.

TABLE 2
TOP FIVE INDUSTRIES AFFECTED DURING CONSTRUCTION PERIOD, BY TOTAL IMPACT ON EMPLOYMENT

Sector Number	Sector Description	Employment (Number of Jobs)	Labor Income (Wages)	Output (Revenue)
60	Construction of new multifamily residential structures	309.7	$60,317,879	$120,635,750
57	Construction of new commercial structures, including farm structures	139.9	$27,240,483	$45,400,803
403	Retail - Clothing and clothing accessories stores	94.4	$2,261,506	$8,240,993
407	Retail - Nonstore retailers	71.3	$2,910,466	$10,438,148
440	Real estate	46.3	$894,590	$10,274,025

Source: Analysis by Nelson, Pope & Voorhis, LLC, via IMPLAN software.

During the construction period, direct *labor income* refer to the earnings, wages, or salary paid to each of the construction workers. Labor income typically comprises approximately 60% of the total cost of commercial/office construction, 50% of the total cost of residential construction, 40% of the total cost of structured parking construction, and 30% of the total cost of site work; the remaining portion represents the cost of construction materials.[7]

Assuming the payment of the current rate of pay specific workers remains constant throughout the construction period, each of the construction workers will earn the projected average annual wage of $64,920 per year. When applied to a 3-year construction period, this represents approximately $194,760 per employee, and over $96.5 million in collective earnings among the 495.5 FTE employees over the theoretical 3-year construction period. This labor income is projected to have an indirect impact of over $24.5 million and an induced impact of over $29.5.5 million, bringing the total economic impact of the construction to over $150.6 million in labor income.[8] A summary of the top industries affected during the construction period, sorted by the total impact on labor income is provided in **Table 3**.

[7] Construction labor and materials estimates per architectural design group Hawkins, Webb, Jaeger, PLLC.

[8] According to IMPLAN, a multiplier of 0.674112 represents the total dollar change in labor income of households employed by all industries for each additional dollar of output delivered to final demand through the "Construction of new multifamily residential structures" (IMPLAN Sector 60) in Suffolk County, New York; a multiplier of 0.697540 represents the total dollar change in labor income of households employed by all industries for each additional dollar of output delivered to final demand through the Construction of new commercial structures, including farm structures" (IMPLAN Sector 57) in Suffolk County, New York; and a multiplier of .572441 represents the total dollar change in labor income of households employed by all industries for each additional dollar of output delivered to final demand through the "Construction of new highways and streets" (IMPLAN Sector 56) in Suffolk County, New York.

TABLE 3
TOP FIVE INDUSTRIES AFFECTED DURING CONSTRUCTION PERIOD, BY TOTAL IMPACT ON LABOR INCOME

Sector Number	Sector Description	Employment (Number of Jobs)	Labor Income (Wages)	Output (Revenue)
60	Construction of new multifamily residential structures	309.7	$60,317,879	$120,635,750
57	Construction of new commercial structures, including farm structures	139.9	$27,240,483	$45,400,803
56	Construction of new highways and streets	45.9	$8,943,004	$22,607,509
395	Wholesale trade	39.7	$3,698,358	$10,065,995
407	Retail - Nonstore retailers	71.3	$2,910,466	$10,438,148

A summary of the derivation of the collective economic benefits during the construction period is provided in **Table 4**.

TABLE 4
ECONOMIC IMPACTS OF CONSTRUCTION

Impact Type	Output (Revenue)	Employment (Number of FTE Jobs)	Labor Income (Wages)
Direct Impact	$188,644,062	495.5	$96,501,366
Indirect Impact	$68,947,550	517.5	$24,577,591
Induced Impact	$85,789,112	606.7	$29,559,622
Total Impact	$343,380,725	1,619.70	$150,638,579

Source: Analysis by Nelson, Pope & Voorhis, LLC, via IMPLAN software.

6.2 Economic Impacts of Annual Operations

For the purpose of this analysis, it is assumed that the operational phase of development will begin upon the completion of the theoretical 3-year long construction period, assumed to be in operation by 2020. At that point in time, it is assumed that the buildings constructed under the Alternative Development Scenario will be operating at near full occupancy, with the majority of its units sold/leased and occupied.

During operations, direct output refers to the total revenues derived from the annual operation of the buildings constructed under the Alternative Development Scenario, per the build out analysis and conceptual plans developed as part of the BOA Nomination Study. This includes revenue generated in the form of monthly rent for the residential units, annual leases from the commercial space, selling prices for the townhouse units, and sales revenues from the commercial space. As seen in **Table 5**, output is estimated to total $96.3 million per year. This includes annual leases of $24.00 per square foot of retail (including both restaurant and non-restaurant use), and office uses. In addition to annual leases, the direct output includes monthly rent from each of the multi-family residences. Such rental rates are estimated at $1,559 per month for 1-bedroom units and $1,859

per month for 2-bedroom units[9]. Direct output also includes the sales revenues generated by each of the proposed uses. According to the International Council of Shopping Centers and the Urban Land Institute, retailers within a given super community/community shopping center on the East Coast of the United States generate median sales of $329.01 per square foot of gross leasable area (GLA).[10] This figure was applied to the retail space (including both restaurant and non-restaurant use) and office use.

[9] Rental rates based upon published rates for 1 bedroom units for recently constructed apartments, and additional $300 for 2-bedroom unit.

[10] All figures reported and published in *"Dollars and Cents of Shopping Centers,"* Urban Land Institute and International Council of Shopping Centers, June 2008.Median sales revenues per square foot derived from all types of retail establishments located in a sample of 41 Super Community/Community Shopping Centers on the East Coast (including Maine, New Hampshire, Vermont, Massachusetts, Connecticut, Rhode Island, New York, Pennsylvania and New Jersey) the United States. It is important to note that the figures do not represent the industry average; however, the participating shopping areas are a representative group, and the results provide benchmarks that can be valuable in analyzing operations.

TABLE 5
PROJECTED DIRECT OUTPUT

Use	Size	Number of Units	Sub-total: Annual Leases[11]	Sub-total: Annual Rent[12]	Sub-total: Residential Sales[13]	Sub-total: Sales Revenues[14]	Total Output: All Sources
Retail	173,848	--	$4,172,352	--	--	$57,197,730	$61,370,082
Restaurant	*50,546*	*20*	*$1,213,104*	--	--	*$16,630,139*	*$17,843,243*
Non-Restaurant	*123,302*	--	*$2,959,248*	--	--	*$40,567,591*	*$43,526,839*
Office	50,028	--	$1,200,672	--	--	$16,459,712	$17,660,384
Townhomes	84,000	28	--	--	$8,960,000	--	$8,960,000
Multi-Family Residences	525,000	420	--	$8,316,000	--	--	$8,316,000
1-Bedroom Units	*210,000*	*210*	--	*$3,780,000*	--	--	*$3,780,000*
2-Bedroom Units	*315,000*	*210*	--	*$4,536,000*	--	--	*$4,536,000*
Total: Development Scenario	**832,876 SF**	**3,434**	**$5,373,024**	**$8,316,000**	$8,960,000	**$73,657,443**	**$96,306,467**

Source: Analysis by Nelson, Pope & Voorhis, LLC, via IMPLAN software.

[11] Annual leases provided by the Town of Riverhead and confirmed by local real estate professional. These reflect lease rates of $24.00 per square foot of office and commercial space.
[12] Monthly rental rates provided based upon comparable units in downtown Riverhead.
[13] Selling prices of $300,000 for the townhomes units assumes pricing per sales of comparable housing units in nearby Mulberry Commons.
[14] Sales revenues of $329.01 per square foot reported and published in *"Dollars and Cents of Shopping Centers,"* Urban Land Institute and International Council of Shopping Centers, June 2008.

The $96.3 million[15] in direct operational revenues are projected to generate an indirect impact of over $19 million and an induced impact of over $20 million per year. This additional output is generated through round-by-round sales made at various merchants in other sectors of the regional economy. These include local retailers, service providers, banks, grocers, restaurants, financial institutions, insurance companies, health and legal services providers, and other establishments in the region. The sum of the direct, indirect and induced impacts results in a total economic impact on output of over $103 million during annual operations.[16] A summary of the top industries affected during annual operations, sorted by the total impact on output is provided in **Table 6**.

TABLE 6
TOP INDUSTRIES AFFECTED DURING ANNUAL OPERATIONS, BY TOTAL IMPACT ON OUTPUT

Sector	Description	Employment (Number of Jobs)	Labor Income (Wages)	Output (Revenue)
440	Real estate	30.6	$904,029	$22,606,308
501	Full-service restaurants	153.7	$3,226,925	$18,479,012
460	Marketing research and all other miscellaneous professional, scientific, and technical services	127.1	$10,410,718	$17,990,219
405	Retail - General merchandise stores	251.4	$8,094,536	$11,794,840
441	Owner-occupied dwellings	0	$0	$2,974,599

Source: Analysis by Nelson, Pope & Voorhis, LLC, via IMPLAN software.

During operations, direct *employment* refers to the number of persons that are employed by the businesses/establishments located within the buildings constructed under the anticipated Alternative Development Scenario. For the purpose of this analysis, it is assumed that the restaurant use will generate an average of one (1) FTE per every 350 square feet; the non-restaurant retail space will generate an average of one (1) FTE employee per every 500 square feet; the office space will generate an average of one (1) FTE employee per every 400 square feet; the townhomes, as well as the multi-family units are assumed to generate an average of one (1) FTE employee per every 50 residential units; and no employment was assumed for the parking facilities.[17]

[15] For the purpose of this analysis, this figure and all other figures in this section reflect 2020 dollars, the year in which a stabilized year of operations is anticipated to commence.

[16] According to IMPLAN, a multiplier of 1.731939 represents the total dollar change in output that occurs in all industries for each additional dollar of output delivered to final demand by "Retail Stores – General Merchandise" (IMPLAN Sector 405) in Suffolk County, New York; a multiplier of 1.64555 represents the total dollar change in output that occurs in all industries for each additional dollar of output delivered to final demand by "Full Service Restaurants" (IMPLAN Sector 501) in Suffolk County, New York; a multiplier of 1.628324 represents the total dollar change in output that occurs in all industries for each additional dollar of output delivered to final demand by "Market Research and all other miscellaneous professional, scientific, and technical services" (IMPLAN Sector 460) in Suffolk County, New York; a multiplier of 1.275683 represents the total dollar change in output that occurs in all industries for each additional dollar of output delivered to final demand by "Real estate" (IMPLAN Sector 440) in Suffolk County, New York.

[17] Employee ratios are averages specific to a given industry, as published in various sources. Such sources include but not limited to the Commercial Buildings Energy Consumption Survey by the Energy Information Administration, Long Island Business News, CEQR Technical Manual, as well as Federal, State and local planning standards and design publications. Such ratios are considered to be industry standard for such fiscal and economic impact analyses.

TABLE 7
PROJECTED DIRECT EMPLOYMENT

Use	Size	Number of Units	Employee Ratio	Total Employees
Retail	173,848	--	--	391
Restaurant	*50,546*	*20*	*1:350 SF*	144
Non-Restaurant	*123,302*	--	*1:500 SF*	247
Office	50,028	--	1:400 SF	125
Townhomes	84,000	28	1:50 units	1
Multi-Family Residences	525,000	420	1:50 units	8
1-Bedroom Units	*210,000*	*210*	*1:50 units*	4
2-Bedroom Units	*315,000*	*210*	*1:50 units*	4
Total: Alternative Development Scenario		**--**	**--**	**525**

The 525 FTE direct employment positions are projected to result in an indirect impact of 111.1 FTE jobs, and an induced impact of 130.6 FTE jobs throughout the region, bringing the total economic impact of operational employment to 766.6 FTE jobs during annual operations.[18] A summary of the top industries affected during annual operations, sorted by the total impact on employment is provided in **Table 8**.

TABLE 8
TOP INDUSTRIES AFFECTED DURING ANNUAL OPERATIONS, BY TOTAL IMPACT ON EMPLOYMENT

Sector	Description	Employment (Number of Jobs)	Labor Income (Wages)	Output (Revenue)
405	Retail - General merchandise stores	251.4	$8,094,536	$11,794,840
501	Full-service restaurants	153.7	$3,226,925	$18,479,012
460	Marketing research and all other miscellaneous professional, scientific, and technical services	127.1	$10,410,718	$17,990,219
440	Real estate	30.6	$904,029	$22,606,308
464	Employment services	16.4	$786,267	$1,172,541

During operations, direct *labor income* refers to annual wages, earnings or salary that is paid to the 525 FTE employees. It is assumed that the salaries will collectively total over $21.7 million per year, during annual operations of the Alternative Development Scenario. The breakdown of labor income is summarized in **Table 9**.

[18] According to IMPLAN, a multiplier of 16.597067 total change in the number of jobs that occurs in all industries for each additional one million dollars of output delivered to final demand by "Retail Stores – General Merchandise" (IMPLAN Sector 405) in Suffolk County, New York; a multiplier of 22.185208 represents total change in the number of jobs that occurs in all industries for each additional one million dollars of output delivered to final demand by "Full Service Restaurants" (IMPLAN Sector 501) in Suffolk County, New York; a multiplier of 11.989293 represents the total change in the number of jobs that occurs in all industries for each additional one million dollars of output delivered to final demand by "Market Research and all other miscellaneous professional, scientific, and technical services" (IMPLAN Sector 460) in Suffolk County, New York; and, a multiplier of 6.994124 represents total change in the number of jobs that occurs in all industries for each additional one million dollars of output delivered to final demand by "Real estate" (IMPLAN Sector 440) in Suffolk County, New York.

TABLE 9
PROJECTED DIRECT LABOR INCOME

Use	Total Employees	Annual Wages[19]	Total Labor Income
Retail	391	--	$10,882,033
Restaurant	144	*$20,312*	*$2,924,928*
Non-Restaurant	247	*$32,215*	*$7,957,105*
Office	125	$83,140	$10,392,500
Townhomes	1	$50,597	$28,334
Multi-Family Residences	8	$50,597	$425,015
1-Bedroom Units	4	*$50,597*	*$212,507*
2-Bedroom Units	4	*$50,597*	*$212,507*
Total: Development Scenario	**525**	**--**	**$21,727,882**

Source: Project program based upon Alternative Development Scenario 2 prepared by NP&V; New York State Department of Labor Quarterly Census of Employment and Wages; Analysis by Nelson, Pope & Voorhis, LLC.

The $21.7 million in direct labor income is projected to result in an indirect impact of over $6.3 million and an induced impact of nearly $6.8 million, bringing the total economic impact of labor income to over $34.9 million during annual operations.[20] A summary of the top industries affected during annual operations, sorted by the total impact on labor income is provided in **Table 10**.

[19] According to the Quarterly Census of Employment and Wages, as published by New York State Department of Labor, the average annual salary of those employed within the "Food services/places" industry is $20,312; this average annual salary was applied to all employees projected to be employed within restaurants. The average annual salary of those employed within the "Retail trade" industry is $32,215; this average annual salary was applied to all employees projected to be employed within the non-restaurant retail space. The average annual salary of those employed within the "Professional and technical services; information; finance/insurance; and real estate and rental and leasing" industries is $83,140; this average annual salary was applied to all employees projected to be employed within the office space. The average annual salary of those employed within the "Rental and leasing services" industry is $50,597; this average annual salary was applied to all employees projected to be employed within the townhomes and multi-family residences. All figures reflect average annual salary data from 2015, and are specific to the Long Island region.

[20] According to IMPLAN, a multiplier of 0.746148represents the total dollar change in labor income of households employed by all industries for each additional dollar of output delivered to final demand by "Retail Stores – General Merchandise" (IMPLAN Sector 405) in Suffolk County, New York; a multiplier of 0.701998 represents the total dollar change in labor income of households employed by all industries for each additional dollar of output delivered to final demand by "Full service restaurants" (IMPLAN Sector 501) in Suffolk County, New York; a multiplier of 0.280277 represents the total dollar change in labor income of households employed by all industries for each additional dollar of output delivered to final demand by "Market Research and all other miscellaneous professional, scientific, and technical services" (IMPLAN Sector 460) in Suffolk County, New York; and a multiplier of 0.186877 represents the total dollar change in labor income of households employed by all industries for each additional dollar of output delivered to final demand by "Real estate" (IMPLAN Sector 440) in Suffolk County, New York.

TABLE 10
TOP INDUSTRIES AFFECTED DURING ANNUAL OPERATIONS, BY TOTAL IMPACT ON LABOR INCOME

Sector	Description	Employment (Number of Jobs)	Labor Income (Wages)	Output (Revenue)
460	Marketing research and all other miscellaneous professional, scientific, and technical services	127.1	$10,410,718	$17,990,219
405	Retail - General merchandise stores	251.4	$8,094,536	$11,794,840
501	Full-service restaurants	153.7	$3,226,925	$18,479,012
440	Real estate	30.6	$904,029	$22,606,308
464	Employment services	16.4	$786,267	$1,172,541

Source: Analysis by Nelson, Pope & Voorhis, LLC, via IMPLAN software.

A summary of the derivation of the collective economic benefits during annual operations is provided in **Table 11**.

TABLE 11
ECONOMIC IMPACTS OF ANNUAL OPERATIONS

Impact Type	Output (Revenue)	Employment (Number of Jobs)	Labor Income (Wages)
Direct Effect	$64,227,185*	525	$21,727,882
Indirect Effect	$19,067,746	111.1	$6,374,401
Induced Effect	$20,103,642	130.6	$6,861,100
Total Effect	$103,398,573	766.6	$34,963,383

Source: Analysis by Nelson, Pope & Voorhis, LLC, via IMPLAN software.
*Note: The difference between this figure and the $96.3M shown in Table 5 for total output from all sources is attributed to retail margins.

APPENDIX I-3

LEED Minimum Program Requirements

MINIMUM PROGRAM REQUIREMENTS

LAST UPDATED:

January 2011

USGBC
2101 L STREET, NW
SUITE 500
WASHINGTON, DC 20037
202 828-7422
USGBC.ORG

PRESIDENT, CEO & FOUNDING CHAIRMAN
S. Richard Fedrizzi

OFFICERS
CHAIR
Mark MacCracken
CALMAC Mfg. Corp.
CHAIR ELECT
Elizabeth J. Heider
Skanska
IMMEDIATE PAST CHAIR
Tim Cole
Forbo Flooring Systems
TREASURER
Anthony Bernheim
AECOM
SECRETARY
Punit Jain
Cannon Design

FOUNDERS
David Gottfried
Michael Italiano
S. Richard Fedrizzi

LEED 2009
Minimum Program Requirements

Apply to

LEED 2009 for New Construction and Major Renovations, LEED 2009 for Core & Shell development, LEED 2009 for Schools, LEED 2009 for Commercial Interiors, and LEED 2009 for Existing Buildings: Operations & Maintenance, LEED for Retail – New Construction, LEED for Retail – Commercial Interiors, LEED for Healthcare

Do not apply to LEED for Homes, LEED for Neighborhood Development, or any LEED rating system adopted prior to 2009

Version January 2011

The only change made in this version is the indication that the MPRs apply to recently launched rating systems. These rating systems include: LEED for Retail – New Construction, LEED for Retail – Commercial Interiors, and LEED for Healthcare

INTRODUCTION

This document identifies the MPRs, or minimum characteristics that a project must possess in order to be eligible for LEED Certification. These requirements define the types of buildings that the LEED Green Building Rating Systems were designed to evaluate, and taken together serve three goals: to give clear guidance to customers, to protect the integrity of the LEED program, and to reduce complications that occur during the LEED certification process. The requirements in this document will apply to all those, and only those projects seeking to demonstrate conformance with the rating systems listed above.

Definitions, exceptions, and more extensive guidance relating to these MPRs are available in a separate document titled: *LEED 2009 MPR Supplemental Guidance*. Terms that are *italicized and underlined* here are defined in the Supplemental Guidance document (they are marked as such only the first time that they appear).

At this time U.S. Green Building Council, Inc. has authorized the Green Building Certification Institute (GBCI) to confer LEED Certification. GBCI has agreed to consider requests for exceptions to MPRs that are not already defined in the LEED 2009 MPR Supplemental Guidance document on a case-by-case basis for special circumstances.

In addition to complying with the MPRs, a project must also demonstrate compliance with all rating system requirements in order to achieve LEED Certification.

1. MUST COMPLY WITH ENVIRONMENTAL LAWS

New Construction, Core & Shell, Schools, Commercial Interiors, Retail – New Construction, Retail – Commercial Interiors, Healthcare

The *LEED project building or space*, all other *real property* within the *LEED project boundary*, and all *project work* must comply with applicable federal, state, and local building-related environmental laws and regulations in place where the project is located. This condition must be satisfied from the date of *LEED project registration* or the commencement of *schematic design*, whichever comes first, up and until the date that the building receives a *certificate of occupancy* or similar official indication that it is fit and ready for use.

Existing Buildings: O&M

The LEED project building, all other real property within the LEED project boundary, any project work, and all *normal building operations* occurring within the LEED project building and the LEED project boundary must comply with applicable federal, state, and local building-related environmental laws and regulations in place where the project is located. This condition must be satisfied from the commencement of the LEED project's initial LEED-EB: O&M *performance period* through the expiration date of the LEED Certification.

All Rating Systems

A lapse in a project's compliance with a building-related environmental law or regulation that results from an unforeseen and unavoidable circumstance shall not necessarily result in non-compliance with this MPR. Such lapses shall be excused so long as they are remediated as soon as feasibly possible.

2. MUST BE A COMPLETE, PERMANENT BUILDING OR SPACE

All Rating Systems

All LEED projects must be designed for, constructed on, and operated on a permanent location on already existing *land*. LEED projects shall not consist of mobile structures, equipment, or vehicles. No building or space that is designed to move at any point in its lifetime may pursue LEED Certification.

New Construction, Core & Shell, Schools, Retail – New Construction, Healthcare

LEED projects must include the new, ground-up design and construction, or *major renovation*, of at least one commercial, institutional, or high-rise residential building in its *entirety*.

Commercial Interiors, Retail – Commercial Interiors,

The LEED project scope must include a *complete interior space* distinct from other spaces within the same building with regards to at least one of the following characteristics: ownership, management, lease, or party wall separation.

Existing Buildings: O&M

LEED projects must include at least one existing commercial, institutional, or high-rise residential building in its entirety.

3. MUST USE A REASONABLE SITE BOUNDARY

New Construction, Core and Shell, Schools, Existing Buildings: O&M, Retail – New Construction, Healthcare

1. The LEED project boundary must include all contiguous land that is associated with and supports normal building operations for the LEED project building, including all land that was or will be disturbed for the purpose of *undertaking the LEED project*.
2. The LEED project boundary may not include land that is owned by a party other than that which owns the LEED project unless that land is associated with and supports normal building operations for the LEED project building.
3. LEED projects located on a campus must have project boundaries such that if all the buildings on campus become LEED certified, then 100% of the gross land area on the campus would be included within a LEED boundary. If this requirement is in conflict with MPR #7, Must Comply with Minimum Building Area to Site Area Ratio, then MPR #7 will take precedence.
4. Any given parcel of real property may only be attributed to a single LEED project building.
5. *Gerrymandering* of a LEED project boundary is prohibited: the boundary may not unreasonably exclude sections of land to create boundaries in unreasonable shapes for the sole purpose of complying with prerequisites or credits.

Commercial Interiors, Retail – Commercial Interiors

If any land was or will be disturbed for the purpose of undertaking the LEED project, then that land must be included within the LEED project boundary.

4. MUST COMPLY WITH MINIMUM FLOOR AREA REQUIREMENTS

New Construction, Core and Shell, Schools, Existing Buildings: O&M, Retail – New Construction, Healthcare

The LEED project must include a minimum of 1,000 square feet (93 square meters) of gross floor area.

Commercial Interiors, Retail – Commercial Interiors

The LEED project must include a minimum of 250 square feet (22 square meters) of gross floor area.

5. MUST COMPLY WITH MINIMUM OCCUPANCY RATES

New Construction, Core & Shell, Schools, Commercial Interiors, Retail – New Construction, Retail – Commercial Interiors, Healthcare

Full Time Equivalent Occupancy

The LEED project must serve 1 or more *Full Time Equivalent* (FTE) occupant(s), calculated as an annual average in order to use LEED in its entirety. If the project serves less than 1 annualized FTE, optional credits from the Indoor Environmental Quality category may not be earned (the prerequisites must still be earned).

Existing Buildings: O&M

Full Time Equivalent Occupancy

The LEED project must serve 1 or more Full Time Equivalent (FTE) occupant(s), calculated as an annual average in order to use LEED in its entirety. If the project serves less than 1 annualized FTE, optional credits from the Indoor Environmental Quality category may not be earned (the prerequisites must still be earned).

Minimum Occupancy Rate

The LEED project must be in a state of *typical physical occupancy*, and all building systems must be operating at a capacity necessary to serve the current occupants, for a period that includes all performance periods as well as at least the 12 continuous months immediately preceding the first submission for a review.

6. MUST COMMIT TO SHARING WHOLE-BUILDING ENERGY AND WATER USAGE DATA

All Rating Systems

All certified projects must commit to sharing with USGBC and/or GBCI all available actual whole-project energy and water usage data for a period of at least 5 years. This period starts on the date that the LEED project begins typical physical occupancy if certifying under New Construction, Core & Shell, Schools, or Commercial Interiors, or the date that the building is awarded certification if certifying under Existing Buildings: Operations & Maintenance. Sharing this data includes supplying information on a regular basis in a free, accessible, and secure online tool or, if necessary, taking any action to authorize the collection of information directly from service or utility providers. This commitment must carry forward if the building or space changes ownership or lessee.

7. MUST COMPLY WITH A MINIMUM BUILDING AREA TO SITE AREA RATIO

All Rating Systems

The gross floor area of the LEED project building must be no less than 2% of the gross land area within the LEED project boundary.

PLATES

Peconic River/ Route 25 Corridor NYS BOA Step II Nomination

ISSUES & OPPORTUNITIES MAP

Issue: DEC WSSR designation.
Majority of western portion of study area is located within "Recreational" designation which significantly restricts development.
Opportunity: Consider application for a change in designation to "Community" class for a portion of this area to incentivize redevelopment. [IN PROGRESS]

Issues: Retail on Route-58 leads to no capture for downtown Rivehead.
Opportunity: Need for signage at gateway. Provide highway directional exit sign for scenic route to historic Riverhead Downtown for food, unique shopping and entertainment.

Issue: Poor aesthetics at gateways.
The stretch of roadway between Tanger and downtown is unattractive, uninviting for would be visitors to downtown.
Opportunity: Create a more inviting approach to attract newcomers and shoppers through landscaping, street trees, lighting, signage & property enhancements.

Issue: Poor site design/maintenance along West Main Street brings down the area.
Opportunity: Prepare and incorporate specific design requirements to improve the character and scenic quality.

Issue: Limited access to the Peconic River.
Opportunity: Continuous Riverfront Access
Establish a system for requiring or incentivizing access easement along Peconic River for hiking trail, with sidewalks to connect where not feasible.

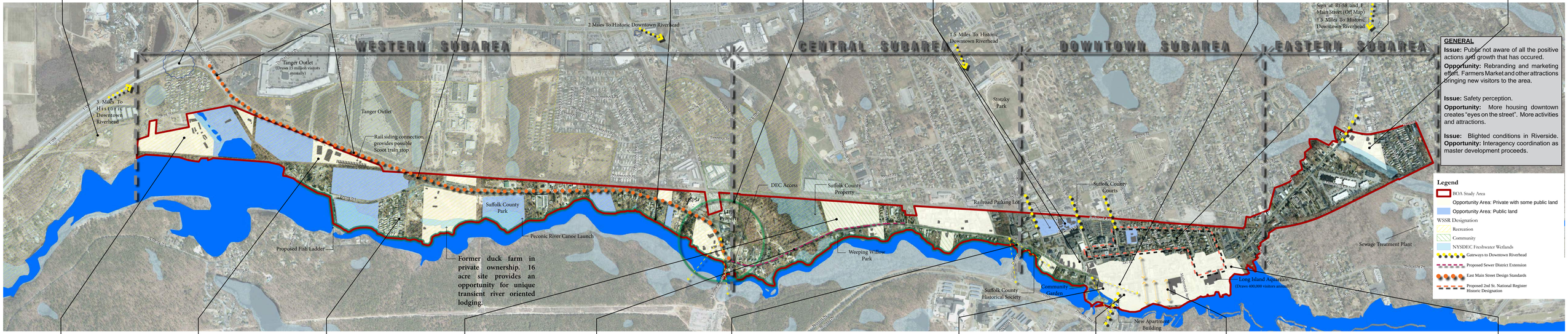
Issue: Several restaurants provide opportunity for niche.
Opportunity: Mini Hamlet Area (Peconic Landing)
Build on "river oriented" recreational activities and amenities. Provide directional/ wayfinding signage to historic downtown.

Issues: Underutilized properties on West Main Street and near train station.
Opportunities: Potential location along West Main Street to support a grocery store proximate to the heart of downtown.
Potential for mixed use near train station.
Provision to encourage apartments on upper floors.

Issue: Traffic congestion during peak periods. Confusing intersection leads to delays, accidents & poor pedestrian environment.
Opportunity: Possible one-way northbound on Peconic Avenue with southbound for emergency vehicles only or other mitigation to improve traffic flow and increase safety for pedestrians.

Issue: Historic homes along 2nd Street.
Opportunity: New National Register Historic Designation. Pursue National Register historic designation for 2nd Street between Griffing Ave and Ostrander Ave.
[IN PROGRESS]

Issue: Pre-existing non-conforming use, noise concerns from Gershow recycling.
Opportunity: Consider re-use potential for conforming compatible uses in long term and provide incentives/ possible multi-family development.



GENERAL
Issue: Public not aware of all the positive actions and growth that has occured.
Opportunity: Rebranding and marketing effort. Farmers Market and other attractions bringing new visitors to the area.

Issue: Safety perception.
Opportunity: More housing downtown creates "eyes on the street". More activities and attractions.

Issue: Blighted conditions in Riverside.
Opportunity: Interagency coordination as master development proceeds.

Issue: Historic duck farm.
Opportunity: Portion of site had development rights acquired. Minimal redevelopment potential under WSRR recreation designation. Possible re-use for river related recreation and limited transient lodging.

Issue: Vacant lumber yard site within WSRR recreational corridor.
Opportunity: Community designation if approved will allow additional uses, more incentive for redevelopment project.
Rail siding connection provides possible Scoot Train stop.

Issue: Existing trailer park without public sewer, a relatively high source of nitrogen loading to Peconic River.
Opportunity: Investigate potential for sewer extension or state-of-art on-site denitrification system following guidelines and standards of sustainable infrastructure.

Issues: Former MOSF site/ under utilized commercial and Blackman Plumbing (eastern sites).
Opportunity: Potential strategic redevelopment site with expansion of Blackman Plumbing Showroom in the eastern area (site plan previously approved).

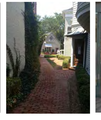
Issues: Water quality impacts from existing development and needs for wastewater treatment to support redevelopment.
Opportunity: Sewer District Extension
Study potential to extend public sewer district to Mill Road to allow redevelopment opportunities and limited growth within DEC WSRR designation.

Issues: Few views of the River from West Main Street.
Opportunity: Replant overgrown public ROWs and implement green infrastructure stormwater management techniques while improving views of the river.

Issue: Need more to do downtown.
Opportunities: Create a focal element to symbolizes a "sense" of destination (possibilities include: an open plaza with water fountain, play area, ferris wheel, a multi use pavilion to house farmers market, or synthetic ice rink).
Continued coordinated programming.

Issue: Flooding of parking lot and Peconic Avenue during storm event and corresponding high tides.
Opportunities: Explore long range options for elevating road and parking lot elevation. New building to conform to FEMA standards.

Issue: Need for improvements and pedestrian safety, walkability, lighting, connections between places/ parking.
Opportunities: Implement coordinated signage plan, and create accessible attractive clear routes between parking and destinations. Plan ahead for parking garage.



Issue: Downtown zoning currently allows high density without amenities. Infrastructure cannot support full build-out.
Opportunity: Limit density and require amenities, parking. Establish TDR program to require TDR to achieve higher density in downtown by purchasing river front land on West Main Street for public use.

PLATE 1

Peconic River/ Route 25 Corridor NYS BOA Step II Nomination

RIVERHEAD BOA ALTERNATIVE DEVELOPMENT SCENARIOS

Site ID: W2; 1.55 Acres
Existing: Dynamic Auto (existing non-conforming use)
Alternative Development:
Scenario-1: Existing/ Baseline
Scenario-2: Compatible commercial use
Scenario-3: Similar to Scenario-2

Site ID: W4; 0.84 Acres
Existing: Auto Lab (existing non-conforming use)
Alternative Development:
Scenario-1: Existing/ Baseline
Scenario-2: Compatible commercial use
Scenario-3: Similar to Scenario-2

Site ID: W6; 1.66 Acres
Existing: Industrial; Outdoor Storage
Alternative Development:
Scenario-1: Existing/ Baseline
Scenario-2: Compatible commercial use of same building size
Scenario-3: Similar to Scenario-2

Site ID: C3; 3.89 Acres
Existing: Blackman Plumbing (18,225 SF)
Alternative Development:
Scenario-1: Existing/ Baseline
Scenario-2: New showroom approved plan 40,000 SF total
Scenario-3: Similar to Scenario-2

Site ID: C5; 10.84 Acres
Existing: Mix of light industrial and commercial uses
Alternative Development:
Scenario-1: Existing/ Baseline
Scenario-2: Planned Business Park
Scenario-3: Similar to Scenario-2

Site ID: D2; 0.74 Acres
Existing: Vacant Building
Alternative Development:
Scenario-1: 2,400SF Simple Table Restaurant
Scenario-2: Similar to Scenario-1
Scenario-3: Similar to Scenario-2

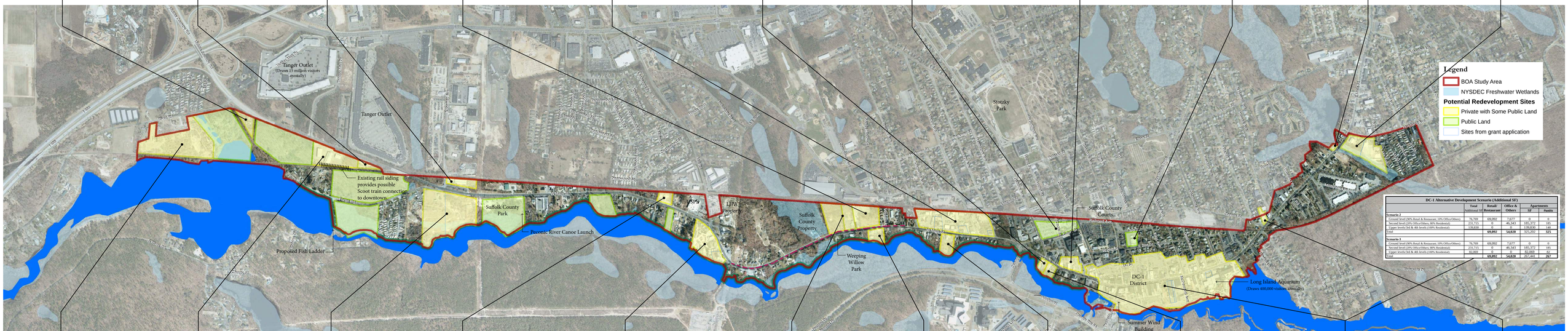
Site ID: D1; 3.42 Acres [Both Private & Public Land]
Existing: Parking Lot, Retail, Commercial, Residential
Alternative Development:
Scenario-1: Existing/ Baseline
Scenario-2: Coordinated Mixed Use
(SEE "DARE TO DREAM" CONCEPT)
Scenario-3: Multiplex with parking structure

Site ID: D4; 1.82 Acres [Multiple Lots Privately Owned]
Existing: Commercial; Office
Alternative Development:
Scenario-1: Existing/ Baseline
Scenario-2: Griffing & Main St.
(SEE "DARE TO DREAM" CONCEPT)
Scenario-3: Similar to Scenario-2

Site ID: D5; 1.08 Acres
Existing: Fire Department HQ
Alternative Development:
Scenario-1: Existing/ Baseline
Scenario-2: Re-use of existing building for public use
Scenario-3: Similar to Scenario-2

Site ID: E2; 0.22 Acres
Existing: Sap Enterprises Auto Repair
Alternative Development:
Scenario-1: Existing/ Baseline
Scenario-2: Compatible Use per Code
Scenario-3: Gateway Park

Site ID: E3; 5.94 Acres
Existing: Auto Salvage (Non-conforming Use)
Alternative Development:
Scenario-1: Existing/ Baseline
Scenario-2: Approx. 28 multifamily units
Scenario-3: Similar to Scenario-2



DC-1 Alternative Development Scenario (Additional SF)					
	Total Additional SF	Retail/ Restaurant	Office & Others	Apartments SF	Apartments Units
Scenario-2					
Ground level (90% Retail & Restaurant; 10% Office/Others)	76,769	69,092	7,677	0	0
Second level (20% Office/Others; 80% Residential)	231,715	0	46,343	185,372	185
Upper levels/3rd & 4th levels (100% Residential)	139,830	0	0	139,830	140
Total		**69,092**	**54,020**	325,202	**325**
Scenario-3					
Ground level (90% Retail & Restaurant; 10% Office/Others)	76,769	69,092	7,677	0	0
Second level (20% Office/Others; 80% Residential)	231,715	0	46,343	185,372	185
Upper levels/3rd & 4th levels (100% Residential)	82,069	0	0	82,069	82
Total		**69,092**	**54,020**	267,441	**267**

Site ID: W1; 13.81 Acres
Existing: Former Duck Farm (Residential)
Alternative Development:
Scenario-1: Existing/ Baseline
Scenario-2: River oriented transient lodging
Scenario-3: Six (6) single family homes

Site ID: W3; 5.52 Acres
Existing: Former 84 Lumber (total 40,200 SF bldg.)
Alternative Development:
Scenario-1: Existing/ Baseline
Scenario-2: 10,000 SF Visitor Center/ food court with Scoot train
Scenario-3: Multiplex/ IMAX Theatre with food court

Site ID: W5; 16.2 Acres
Existing: Former Duck Farm
Alternative Development:
Scenario-1: Existing/ Baseline
Scenario-2: River oriented transient lodging
Scenario-3: Five (5) single family homes

Site ID: W7; 1.33 Acres
Existing: "For Sale" Propane Business
Alternative Development:
Scenario-1: Existing/ Baseline
Scenario-2: Approx. 4,500 SF commercial
(Per DEC WSRR Regs.)
Scenario-3: Similar to Scenario-2

Site ID: C1; 1.38 Acres
Existing: Auto, Commercial, Restaurant, Residential
Alternative Development:
Scenario-1: Existing/ Baseline
Scenario-2: Peconic Overlook (SEE "DARE TO DREAM" CONCEPT)
(9,600 SF Retail & Restaurant; 8,000 SF B&B)
Scenario-3: Similar to Scenario-2

Site ID: C2 + C8; 3.81 Acres + 2.06 Acres
Existing: Former MOSF Site & 5,000 SF bldg.
Alternative Development:
Scenario-1: Existing/ Baseline
Scenario-1: Approx. 20,000 SF compatible commercial use
Scenario-3: Similar to Scenario-2

Site ID: C4; 1.49 Acres
Existing: National Propane
Alternative Development:
Scenario-1: Existing/ Baseline
Scenario-2: Approx. 6,000 SF commercial
Scenario-3: Compatible commercial use of same building size

Site ID: C6; 1.93 Acres
Existing: Art Sites
Alternative Development:
Scenario-1: Existing/ Baseline
Scenario-2: Alternative compatible commercial use
Scenario-3: Similar to Scenario-2

Site ID: D3; 0.95 Acres
Existing: Marathon Motors/ Used Car Sale
Alternative Development:
Scenario-1: Existing/ Baseline
Scenario-2: Approx. 4,000 SF compatible commercial use
Scenario-3: Similar to Scenario-2

Site ID: D6; DC-1 District (Approx. 47.25 Acres)
Existing: Various conforming and non-conforming uses
Alternative Development:
Scenario-1: Existing/ Baseline (includes proposed developments such as Summer Wind, Woolworth, & Zenith)
Scenario-2: Reduced build-out (please refer to the table above)
Scenario-3: Reduced build-out (please refer to the table above)

Site ID: E1; 0.52 Acres
Existing: Vojvoda's Cleaners
Alternative Development:
Scenario-1: Existing/ Baseline
Scenario-2: Alternative compatible use
Scenario-3: Similar to Scenario-2

PLATE 2