TOWN OF GRAND ISLAND
COMPREHENSIVE PLAN

2255 Baseline Road
Grand Island, New York 14072

January 1995
Revised November 1998

(Revised by URS Greiner, Inc. to include the Ferry Village Master Plan as adopted by the Town Board on July 6, 1998)

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Special thank you to other participants:
Grand Island Central School District, New York State Department of Environmental Conservation, Grand Island Chamber of Commerce, Quality Quest Coalition, Ferry Village Area Residents Association, West River HOA, Past board members, LaVerne C. Luther – Supervisor, Robert G. Swan – Councilman, Paul F. Klock – Councilman, Thomas Morrisey – Planning Board, Robert Blaney – Planning Board and the people of Grand Island

TOWN OF GRAND ISLAND
FERRY VILLAGE MASTER PLAN

Adopted July 1998

Prepared by:
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The Ferry Village Master Plan is the result of extraordinary community involvement in local planning issues and research. We must acknowledge the residents of Ferry Village for their articulate vision and participation in guiding the future of their community.

TOWN OF GRAND ISLAND
COMPREHENSIVE PLAN

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I. INTRODUCTION

This document is the comprehensive plan for the Town of Grand Island. It is the end-product of a process designed to inventory the community's resources, develop a vision for the community's future, and refine goals and objectives into a plan that will aid the community in its efforts to realize its vision. For purposes of this plan, goals constitute statements regarding the end product of community actions. Objectives, for planning purposes, are identifiable or measurable changes related to the attachment of one or more goals.

Comprehensive planning activities play an important role in the continued development of a community. The planning process is an organized manner by which a community can identify its needs and establish goals and objectives for future action. Development and implementation of a comprehensive plan are effective and efficient means to achieving meaningful and desired change in a steady, incremental manner. Furthermore, the comprehensive plan serves to identify changes or trends that are desirable or undesirable in the community.

Prior to development of this document, a summary of the existing natural and built physical characteristics of the town along with demographic and economic characteristics was prepared and presented in a document titled "THE TOWN OF GRAND ISLAND COMPREHENSIVE PLAN PHASE I INVENTORY AND ANALYSIS COMPONENT." That document is incorporated within this comprehensive plan by reference.

Subsequent to adopting the comprehensive plan, the Town of Grand Island embarked on a series of implementation tasks, the most ambitious of which is the Ferry Village Master Plan. The plan provides neighborhood level recommendations for the hamlet. The plan underwent an environmental review in accordance with state environmental requirements and has been adopted as an amendment to the comprehensive plan. The document titled "FERRY VILLAGE MASTER PLAN - DRAFT ENVIRONMENTAL IMPACT STATEMENT" is incorporated within this document by reference. Specific elements of the plan are included herein.

Location

The Town of Grand Island is located north of the City of Buffalo and south of the City of Niagara Falls. Unlike many suburban communities, the Town of Grand Island is physically separated from surrounding communities by the Niagara River. The town occupies 27 square miles of land in northwestern Erie County and is encircled by the East and West channels of the Niagara River. There are approximately 22 miles of shoreline in the town. On the opposite shore to the north lies the City of Niagara Falls and the Town of Wheatfield. To the east lies the City of North Tonawanda and the Town of Tonawanda. Fort Erie, Canada lies south and west.

The Town of Grand Island is accessible by the Niagara Section of the Thomas E. Dewey Thruway via the North and South Grand Island Bridges, connecting at the City of Niagara Falls to the North and at the Town of Tonawanda to the South. No other highway access on and off the island is available.

Purpose and Need

The purpose of this comprehensive plan is to define the community's vision for the Town of Grand Island in the form of a physical plan to organize and control natural growth and to provide the framework for achieving the community's goals and objectives. It is designed to be used by the community as a tool for reviewing proposed projects and as a guide in determining the best use of a piece of property.

The current comprehensive planning effort is in response to pressures resulting from the outward movement of suburban growth from the cities of Buffalo and Niagara Falls. This increased growth pressure is due, in large part, to the construction of the Grand Island Bridges. These growth pressures have begun to raise concerns over the future pattern of land use on Grand Island and its impact on open space resources and the rural character of the community. Many of the recommendations of the existing plan have been achieved and new growth parameters and guidelines must now be developed to replace those in the existing comprehensive plan. The primary focus of this update to the 1969 plan is to address the future land use of the Town of Grand Island and to refit many of the previous planning elements to meet today's needs and challenges.

This comprehensive plan was formally amended to include the Ferry Village Master Plan. The three project sponsors, the Horizons Waterfront Commission, the New York State Office of Parks, Recreation and Historic Preservation, joined together in that planning effort to work with the local advisory committee to comprehensively plan for Ferry Village. The Town of Grand Island initiated the effort with the creation of its Local Waterfront Revitalization Plan and through recommendations in this comprehensive plan update. This plan recommended that the Town undertake a neighborhood master plan which would clearly define goals and objectives for the Village's revitalization effort.

The Horizons Waterfront Commission Action Plan for the Erie County Waterfront, adopted in 1992, also called for revitalization of Ferry Village. The development component of the action plan identified Ferry Village as a site for expanded water-dependent commercial uses, linked to the Village by a waterfront promenade and an expanded bicycle and pedestrian trail system along the island's shoreline. The plan identified key commercial uses which could include enhanced marina development, coupled with a riverside restaurant and expanded residential opportunities.

One of the goals of the New York State Office of Parks, Recreation and Historic Preservation is to continue to enhance Beaver Island State Park as one of the State's premier recreational facilities. Their primary interest in the Ferry Village study was to create a planning framework and conceptual site design for the East River Marina at the northeast corner of the park. Siltation problems along the Niagara River, especially near Ferry Village, coupled with other navigational hazards such as sunken barges, have prevented both public and private marinas from operating at capacity.

Prior to this plan's adoption in August of 1994, the Town of Grand Island was guided by a Comprehensive Plan that was prepared in 1969 by Candeub, Fleissig and Associates.

II. OPPORTUNITIES AND CONSTRAINTS

Based upon the inventory and analysis of the built and natural features of the Town of Grand Island, as discussed in "Inventory and Analysis", the opportunities and constraints to development are described in the ensuing pages. These opportunities and constraints provide the basis for developing the comprehensive plan for the Town of Grand Island.

Opportunities

Shoreline

The Town of Grand Island has limited public access to the shoreline. Areas currently providing public access include the following.

- Beaver Island State Park
- Buckhorn Island State Park (although limited to nature trails)
- Overlook areas along the West River Parkway
- Six Mile Creek Marina

Opportunities do exist to expand public waterfront access areas on Grand Island. The town does not possess a waterfront park facility. A potential park site has been identified along the east shore of the island to the north of the Holiday Inn. Another opportunity exists to develop a bikeway along the perimeter of the island, taking advantage of water views. In addition, water related recreation activities may be feasible on town leased property west of Buckhorn Island State Park, north of the water pump station.

Economic Development

A major growth area in the Town of Grand Island is related to the industrial uses. Industrial growth in the town has been dramatic. The town currently possesses three (3) industrial parks and has substantial vacant property for additional industrial expansion.

Second, the tourism industry is very strong. A number of proposals for development of a new hotel have been made. There is also a strong demand for boat slips. Marina development, therefore, is a potentially strong opportunity.

Housing

The Town of Grand Island has experienced rapid residential growth. There has been a 10.3 percent increase in the total number of dwelling units constructed between 1980 and April 1989. Furthermore, the town has a number of subdivisions, proposed and approved, which will add a significant number of dwelling units to those already existing on the island. As of May 1992, a total of 3,110 residential lots have been identified as approved, under review or in the planning stages. Of the approved and platted subdivisions, 937 lots have been improved while 305 lots remain vacant. Many of the unimproved lots may, however, impinge on significant environmental resources that merit reconsideration of the subdivision.

Streams

A number of protected streams exist on Grand Island. Further protection and enhancement of the town's stream corridors present a number of opportunities for preservation of open space corridors and development of public access through possible town acquisition/control of land immediately adjacent to

the streams. This will further ensure that the streams are not degraded by unregulated growth which could possibly jeopardize the streams' viability as habitats or other natural areas.

Historic Resources

The Town of Grand Island contains a number of significant historic sites. The preservation of these sites will offer expanded cultural opportunities for residents of the town and will preserve a part of the history of Grand Island which might otherwise be lost forever.

Wetlands

The Town of Grand Island possesses both state and federally regulated wetland or potential wetland areas. Wetlands generally serve to protect water quality, influence water quantity and preserve environmental health and diversity.

The town's wetlands serve a number of functions which include maintaining the town's environmental health, creating recreational, research and educational sites; maintaining the economic viability of trapping and fishing; and adding to the aesthetics of the community.

Floodplains

Floodplains surround a number of the town's streams and wetlands areas. Floodplains provide opportunities to manage land adjacent to streams and wetlands for flood maintenance, as well as public greenspace corridors.

Undeveloped Lands

The Town of Grand Island contains approximately 3,840 acres of vacant land. This land represents the island's land resources which have not been identified for development (proposed or approved subdivisions). An opportunity exists to preserve significant environmental areas, as well as accommodate further growth on Grand Island.

Utilities

The Town of Grand Island is fully serviced by the town's water system. The area west of the New York State Thruway is not serviced by the town's sewer system. However, the office/light manufacturing proposal envisions boring a sewer force main under the Thruway linking to the sewage treatment plant. This would provide the town with the first opportunity to extend sewer service to the west side of the island. This will facilitate additional office and industrial development in a limited area between Bedell Road and Long Road, immediately adjacent to the Thruway.

Circulation Pattern

An opportunity exists to lessen traffic on the town's east-west and north-south roadways by constructing a loop road in the interior section of Grand Island. This could lessen traffic levels on the town's perimeter roadways by distributing traffic evenly on the existing network and providing routing options during peak traffic hours.

Constraints

Circulation Patterns/Bridge Capacity

Traffic congestion on the Grand Island Bridges is the primary circulation issue. Community growth is limited by long lines at the bridges during periods of repair and at peak hours under normal road operation. The Level of Service (LOS) for the South Grand Island Bridge is currently operating at LOS "E" while the North Grand Island Bridge is operating at LOS "D". Both are projected to degrade to LOS "F" if no actions are taken to rectify the present operating deficiencies.

Level of Service for roadway sections is defined as a "qualitative measure of describing operational conditions within a traffic stream, and their perception by motorists and/or passengers." A Level of Service definition usually describes these conditions in terms of such factors as speed and travel time, freedom to maneuver, traffic interruptions, comfort and convenience and safety.

Six Levels of Service have been identified. These are briefly described below:

Level of Service A

Represents free flow. Individual users are virtually unaffected by the presence of others in the traffic stream. Freedom to select desired speeds and to maneuver within the traffic stream is extremely high. The general level of comfort and convenience provided to the motorist or pedestrian is excellent.

Level of Service B

Is in the range of stable flow, but the presence of other users in the traffic stream begins to be noticeable. Freedom to select speed is relatively unhindered but freedom to maneuver is slightly less than LOS A. Levels of comfort and convenience are also somewhat less than LOS A.

Level of Service C

Is in the range of stable flow but marks the beginning of more restrictive movement and speed flow. General levels of comfort and convenience decline significantly from LOS B.

Level of Service D

Represents high density but stable flow. Speed and freedom to maneuver are severely restricted and the driver and/or pedestrian experiences poor levels of comfort and convenience.

Level of Service E

Represents operating conditions at or near the capacity level. All speed limits are reduced to a low but relatively uniform value. Freedom to maneuver in the traffic stream is extremely difficult. Comfort and convenience levels are extremely poor.

Level of Service F

Used to define forced or breakdown flow. The condition exists wherever the amount of traffic approaching a point exceeds the amount which can traverse the point.

Floodplains

Floodplains present constraints to development while providing natural resource and flood maintenance opportunities. New development activities must comply with all applicable regulations as identified by the town's floodplain ordinance.

Wetlands

The town's wetland areas present a major development constraint. The town contains both state and federally protected wetlands. Development proposals must adhere to 6NYCRR Parts 663 and 664 for state classified wetlands and Section 404 of the Clean Waters Act for federal wetlands.

Soils

Most soils in the Town of Grand Island are poorly drained, some are classified as hydric which can be considered a constraint to development. Before development occurs in soil considered to be hydric, the Army Corps of Engineers must be consulted since other wetland characteristics may also be present.

Sewers

Without expansion of the town's sewer system to areas west of the Thruway, residential growth will require some form of on-site wastewater treatment, limiting development density to what a septic system would permit or requiring an expensive wastewater treatment facility.

III. GOALS AND OBJECTIVES SUMMARY

The goals and objectives for the town were established in the "Inventory and Analysis" component of the comprehensive plan by surveying town residents and discussing issues with town officials and other decision makers. The purpose of developing goals and objectives is to provide guidance in policy decisions and in evaluating land use and development proposals.

In order for a town to set specific goals and objectives, it is necessary to have a vision. The vision expresses residents' attitudes toward managing growth and provides a framework for making decisions affecting how resources identified in the physical, cultural and demographic inventories of the town will be managed. The comprehensive plan is the instrument that will guide the town to realize its vision. Results of the "Inventory and Analysis" suggest that the town visualizes itself as a complete town, capable of providing its citizens with a variety of housing types, opportunities for employment and business, public facilities of all kinds, and places for relaxation, recreation and enjoyment. This type of town is capable of accommodating growth while preserving open space and creating sufficient recreational facilities for a growing population.

Considerable effort was expended to assist Ferry Village residents, property owners, and the Grand Island community-at-large to frame a vision for the future of Ferry Village. Those efforts included an 800-piece mailed survey that reached all of the residents of the Ferry Village study area and a 5 percent sampling of other Grand Island residents, and meetings with stakeholders who live, work, and conduct business in the village. The following goals and objectives include those specifically for Ferry Village.

Goal 1: Land Use

The plan should ensure the maintenance of low profile, low density development while maximizing the preservation of open space to reduce conflicts between various land uses, and guide construction and restoration as well as preserve important land resources

Objectives — Work with community leaders to assure growth of community services, protect existing neighborhoods from more intensive land uses, control commercial development, protect wetland areas for habitat and recreational use, and use the comprehensive plan in conjunction with town law for decision making.

Goal 2: Transportation

Minimize traffic congestion, maintain existing roads, and ensure future improvements are beneficial to the town

Objectives — Regulate development, curb cuts along commercial roadways, provide landscaping and pedestrian improvements, require handicapped accessible sidewalks, encourage bikeway/trail development, assess effectiveness of posted speed limits, encourage study of a new exit and inner loop road, and establish minimum right-of-ways.

Goal 3: Government Services/Utilities

Promote development, maintenance and enhancement of government and community services in a cost-effective manner

Objectives Coordinate utility recommendations with land use policy, preserve and enhance utilities to allow for managed growth, structuring utility rate system to financially support operation, maintenance, replacement and expansion of capital facilities, requiring new developments to place electric lines underground, and placing existing overhead lines underground where possible.

Goal 4: Visual Resources

Enhance and maintain the visual resources of the town

Objectives Develop a method to preserve the scenic views of the Niagara River as well as streams and wetlands, identify and preserve scenic roads and places in the town, maintain rural and historic areas of the town, require more landscaping and scenic view preservation as part of site plan review and by enactment of local laws, encourage harmonious site details (signage, lighting, etc.) in new developments and where improvements occur, and encourage upkeep of existing structures.

Goal 5: Cultural Resources

Promote the historic and cultural heritage of the town

Objectives Encourage and support preservation and adaptive use of historic properties, and require new developments to incorporate historic and cultural resources into project plans.

Goal 6: Open Space and Recreation

Improve and expand recreational facilities and preserve and enhance permanent open space.

Objectives Encourage the development of diverse recreational facilities, expand the trail/bikeway system, using innovative land use controls, encourage development of recreational facilities adjacent to the Niagara River and other water bodies, and include the Town Recreation Department in all development review phases.

Goal 7: Business and Employment

Preserve and strengthen the economy of the town and encourage a growing and diversified economic base

Objectives Continue to attract desirable industrial and business uses, as well as mixed use office/research park/education facilities; encourage the siting of industrial and commercial uses near major roadways and away from residential areas; and review current tax abatement policies.

Goal 8: Housing

Promote a variety of quality housing opportunities which are affordable and accessible for all residents

Objectives Provide an appropriate range of housing types, densities and price ranges; provide better housing for elderly and handicapped persons; and review the compatibility of development design with the surroundings.

Goal 9: Environmental Resources

Preserve and maintain the quality of the town's environmental features

Objectives Coordinate the comprehensive plan with the Local Waterfront Revitalization Plan and the Horizons Waterfront Plan; protect the Niagara River shoreline and environmentally sensitive wetlands and streams; encourage greenbelt corridors to provide open space, wildlife habitat, and flood protection; continuing to utilize SEQR; encouraging and/or requiring dedication of open space in new developments; and protecting environmentally sensitive areas.

Goal 10: Ferry Village Development and Land Use

The plan should seek to maintain the existing character, ambiance, and land use blend of Ferry Village. Vacant parcels not designated for permanent open space or public recreation uses should be sensitively designed to be consistent with the residential and water-based business uses that currently characterize the village.

Objective Public and private marinas, watercraft sales and service, as well as wet storage and winter storage should be supported, particularly along River Road south of Ferry Road and at the Anchor Marine and Buffalo Launch Club sites. New structures and renovations should reflect the historical character of Ferry Village.

Objective Water-enhanced business uses should be accommodated along Ferry Road between East River Road and the Niagara River in areas currently designated for non-residential uses.

Objective The boundaries and identity of Ferry Village should be maintained by preserving the buffer of open space and recreation land uses that include Beaver Island State Park to the south and west, and the Buffalo Launch Club to the north.

Objective Single-family residential uses at a density consistent with the existing neighborhoods should dominate the land use pattern of the village, and be focused on Orchard, Cox, Allenton, and Elmwood Roads, as well as the portion of East River Road north of Ferry Road.

Objective Industrial and heavy commercial uses should be discouraged.

Objective Existing institutional and semi-public uses, such as the Masonic Temple, Niagara River Station Fishing Club, and Buffalo Launch Club, should be retained as an integral part of Ferry Village's land use pattern. Similar uses and educational uses related to the village's waterfront environment may be encouraged, provided they are in keeping with the low density and residential character of the village and do not generate traffic that would detract from residential values.

Goal 11: Ferry Village Housing

Maintaining the current single-family residential character and density of Ferry Village is the primary goal of the Master Plan.

Objective Revise the Town of Grand Island zoning code to provide a Special Overlay District or Ferry Village Residential Zone which will enable current residential uses to become "conforming" to Town regulations and enable residents to reconstruct existing residences in-kind, should one be destroyed.

Objective Provide incentives for maintaining the affordability of existing residential units while enabling residents to improve their homes.

Objective Maintain current residential densities while providing flexibility in types of units (semi-detached, clustered, patio, etc.) that can be accommodated on vacant parcels.

Objective Encourage the use of cluster, planned unit development, and incentive zoning provisions in order to obtain village amenities such as bikeways, public waterfront access, and open space and encourage the enhancement of new residential uses by providing visual and direct access to the Niagara River.

Objective Provide housing design guidelines to ensure the compatibility of residential units with current residential structures, and the historic architecture of Ferry Village.

Goal 12: Ferry Village Business and Employment

In keeping with current business activities, water-oriented and water-enhanced business uses should be encouraged to remain and to expand in close proximity to the Niagara River.

Objective Water-oriented uses, such as public and private marinas, marine services, boat building and repair, and water-accessible services, will be encouraged to remain and expand along East River Road south of Ferry Road, provided traffic increases that impact residential uses are minimized. Water-enhanced uses may be dependent upon serving a regional need for marine services.

Objective Water-enhanced business uses designed to reflect the mixed use and residential character of that area will be encouraged along Ferry Road east of East River Road to primarily serve the needs of the Town of Grand Island and Ferry Village. Water-enhanced uses which partially serve marina facilities will be encouraged.

Objective Create and modify existing Town land use regulations that encourage water- enhanced business uses, particularly food and service establishments.

Objective Create design guidelines for commercial development which reflect the historic and residential character of the village.

Objective Regional tourism facilities will be limited to those which relate to marine facilities and water-dependent business uses.

Objective Adaptive reuse of historic structures as tourist housing, such as "Bed-and- Breakfast" accommodations, will be encouraged as a mechanism for preserving historically significant and unique structures within both commercial areas and at waterfront locations within residential areas.

Goal 13: Ferry Village Transportation and Access

The village's road system will remain as it currently exists by discouraging land uses which will overload the system and by requiring access improvements that keep vehicular traffic out of predominantly residential areas. A bikeway will be provided. New residential and business uses will be required to provide pedestrian ways.

Objective Land use regulations that match traffic generation with existing roadway capacity will be retained and, where necessary, improved.

Objective New residential and business activities which generate traffic in excess of road capacity will be reduced in size and intensity, or will be required to provide alternate access that does not negatively impact the residential values of the village.

Objective Orchard, Cox, Allenton, and Elmwood Roads will be retained as residential streets without changes in alignment and design. Sidewalks and curbing will be avoided. Drainage and roadway surface improvements will be made where warranted. Street trees will be retained.

Objective A bikeway will be constructed linking the existing bikeway along Beaver Island Parkway with the East River Marina via Ferry and East River Roads. The bikeway will extend along the abandoned section of East River Road to link with the circulation system of Beaver Island State Park and eventually back to Beaver Island Parkway.

Objective Consistent with the village's history, the use of the Niagara River as a transportation route will be encouraged by maintaining current boat launching facilities, including transient docking/mooring facilities at East River Marina.

Goal 14: Ferry Village Urban Design/Visual Resources

The overall pattern of the built environment will be low-profile and residential in character, reflecting the architecture and history of Ferry Village – particularly its role as a waterfront community.

Objective Street trees will be maintained and, where appropriate, new ones planted in order to enhance visual corridors.

Objective A buffer of natural trees and vegetation will be maintained between existing residences and active recreation within Beaver Island State Park. Particular attention will be given to maintaining and protecting the mature stand of oak trees at the end of Elmwood Road.

Objective Significant scenic, architectural, historic, and streetscape resources will be preserved, sometimes through adaptive reuse, while new construction will be guided by design criteria that seek to capture historic architectural values in structures provided for new uses. Those criteria will reflect the existing residential character, as well as the history of the village.

Objective New structures and plantings which substantially close off existing views of the Niagara River will be discouraged unless new visual or access opportunities are created.

Objective A tree ordinance for the Ferry Village area will be developed as a tool for maintaining and enhancing visual resources. An essential element of the ordinance should require that tree removal be permitted only in preparation for site development. This development would require site plan approval by the Town of Grand Island Town Board

Objective Re-establish a presence of street trees and vegetation on the east side of East River and the north side of Ferry Roads.

Goal 15: Ferry Village Environmental Resources

Significant environmental resources identified in the Ferry Village Master Plan will be preserved and, where access will not degrade environmental quality, opportunities for passive enjoyment of these features will be provided.

Objective The Town of Grand Island will request that a habitat evaluation be undertaken prior to any recreational development of the northern area of Beaver Island State Park which is designated by the New York State Department of Environmental Conservation (NYSDEC) and in the Inventory and Analysis of the Grand Island Comprehensive Plan as "Shrubland Habitat." In addition, the state-regulated wetland on the west side of Beaver Island Parkway designated as BW-5 should be protected from development.

Objective The "Forested Habitat" located along the park access road and designated by NYSDEC as FR-BI-1 should be preserved in its current condition.

Objective NYSDEC-regulated wetlands BW-2 and BW-1 should be protected from intensive development. Because of its close proximity to shallow water spawning grounds off Strawberry and Motor Islands and its significance as a waterfowl habitat, wetland BW-2 should be provided with visual access provided its value as a habitat is not degraded. Maintenance activities which negatively impact wetland quality along either branch of the Niagara River should be discouraged.

Objective Plans for the reuse of the East River Marina should provide opportunities to mitigate the erosion of wetland BW-2 and the attendant threat to wildlife habitat. This plan also should take advantage of opportunities to provide visual access to wetlands habitat and direct contact with sport fishing opportunities in deeper waters.

Objective Development within the 100-year flood plain, as defined by the Federal Emergency Management Agency, should be required to follow flood-proofing requirements of NYSDEC.

Goal 16: Ferry Village Historic and Cultural Resources

Preserve existing historic and cultural resources, and ensure that new development is consistent with a common design theme which reflects that heritage.

Objective Create and document an inventory of significant historic and cultural resources and develop preservation and development guidelines for their protection.

Objective Encourage community development activities which capitalize on or celebrate the village's cultural and historic heritage.

Goal 17: Ferry Village Open Space and Recreation

Ensure that significant public open space which defines the boundaries of Ferry Village is preserved and enhanced, while recreation opportunities geared toward neighborhood needs and waterfront location are realized. Waterfront recreation may be provided for town-wide, as well as some regional use.

Objective Encourage preservation of open space and natural features of Beaver Island State Park, while accommodating the improvements of the East River Marina and the potential for expansion of golf facilities north of the existing course.

Objective Provide a trailway link connecting the trailway along Beaver Island Parkway with the East River Marina and possibly connecting the internal road system (trail system) of the Beaver Island State Park.

Objective Provide facilities for a neighborhood recreation area.

Goal 18: Ferry Village Waterfront Access

Increase public access to the Niagara River shoreline for boaters and pedestrians through public and private initiatives. Short-term marina reconstruction at Beaver Island State Park adjacent to Ferry Village is recommended to be limited to re-establishing boat mooring, launching, and storage to current design capacity with enhanced land-side amenities for public recreation. All waterfront reconstruction will be undertaken in such a manner as to not reduce the economic viability of established commercial marinas. Development at the East River Marina is subject to a separate planning process to be undertaken by NYSOPRHP. Goal statements and recommendations relative to the planning and development of state parkland are strictly advisory and non-binding.

Objective Provide an area-wide solution to the sedimentation of small boat harbors north of East River Marina including Blue Water Marina, Niagara River Station Fisherman's Club, Anchor Marine, and the Buffalo Launch Club.

Objective Assist in mitigating boat docking damage by controlling wake action created by heavy use of the Niagara River by recreational boaters.

Objective Support marine activity center redevelopment which may include dredging of new sheltered harbors or installing wake/wave control structures where negative environmental impacts would be mitigated. Cooperative efforts in solutions, finance, design, and implementation, particularly between public and private entities, will be given the higher priority.

Objective Support the establishment of an improved public launching facility as a public or public-private initiative.

Objective Provide flexibility in zoning regulations that encourage water-dependent uses along the Niagara River including water-enhanced uses which increase the economic viability of marinas and similar uses.

Objective Create additional transient mooring facilities at East River Marina as support facilities for local recreation and water-enhanced business use, such as the Village Inn

Objective Provide public fishing access for passive viewing of the Niagara River, historic islands, and waterfowl habitats.

IV. GROWTH POTENTIAL ANALYSIS

The first step in the process of updating the comprehensive plan for the Town of Grand Island was taken in January of 1991, when the "Inventory and Analysis" component was submitted to the town. The purpose of that document was to identify the town's resources, establish goals and objectives for managing community growth and identify opportunities and constraints to that growth. This document becomes the framework for updating the current comprehensive plan.

The next step in the plan development process was to evaluate town growth based on the current zoning regulations and planning policy. This was accomplished by conducting a build-out analysis. The analysis utilized the town's physical constraints to development and current land uses identified in the Inventory and Analysis to arrive at the remaining buildable area. Maximum land use densities were projected under current zoning district regulations to provide an order of magnitude estimates of the number of additional housing units and commercial/industrial floor area that can be accommodated in the town. These estimates were then used to show the current growth trends and to identify the impact of growth on selected community services.

In summary, the build-out analysis provides a view of how effective current land use policy and regulations will be in attaining the goals and objectives set forth in this plan.

Methodology

The build-out analysis was broken down into four general tasks, 1) identification of buildable area, 2) calculation of maximum development potential, 3) analysis of growth impact on key community services, and 4) analysis of the implications of the build-out analysis scenario on the town's planning goals and objectives. Each of the tasks, except for the first, is affected by the outcome of the preceding task.

Identification of Buildable Area

The choice of an appropriate base map was crucial for the purposes of clearly presenting analytical information. Much of the town's mapping was 1" = 1000' and 1" = 2000'. A town composite tax map at 1" = 1000' was selected so that the final product will be compatible with other town maps. Its larger size also provided a better medium for conveying results and ideas.

The next step in mapping buildable area was to use the land use map and extract all vacant land, which resulted in a vacant land overlay. However, within the parcels of vacant land there are approved but unbuilt subdivisions. These were then extracted from the vacant land overlay, identified and inventoried for unit counts to be included in the analysis. In addition to the approved subdivisions, there is land within the vacant parcels that is physically constrained from development. Physical constraints were limited to hydric soils, wetlands, floodplains and park lands. From an engineering standpoint, soil wetness can be controlled or eliminated so that these features of the landscape are not constraints. However, from a legal and conservation standpoint, they are indeed constraints. Other considerations included slopes and significant habitats. Because of their limited area, slopes are not significant determinants of the extent of growth in the Town of Grand Island. Although significant habitats not currently constrain the development process, they will be a greater management consideration in the future. For the purposes of this analysis, however, significant habitats were not discounted from the town's total land resources that are available to accommodate growth.

The result of discounting subdivisions and constraints was a buildable parcel overlay. This was then overlaid onto the town zoning map to identify the zoning district(s) for each parcel. Two sets of

development densities are provided for each zoning district in the town zoning code based on whether or not the parcel is within a sewer district. Therefore, the town sewer district map was used to divide up the parcels.

Generation of Maximum Development Densities

A series of polygons, each representing a parcel of land within a designated zoning district and sewer district (or non-sewered area), were generated. The area of each parcel was measured and the total area was summed for each zoning district within sewered and not sewered areas. Unit counts for residential districts and maximum building floor areas, in square feet, for the business and manufacturing districts were obtained by multiplying total area for each district in sewered and not sewered areas by the appropriate building density as set forth in Chapter 49 from the Code of the Town of Grand Island (zoning code).

Within residential districts, gross residential acreage was adjusted downward by 20 percent to account for projected roadway needs. Whereas the density in units per acre could be determined for the residential districts, based on the maximum area per dwelling unit allowed by the zoning code, it was necessary to address density differently for the business and manufacturing districts. Maximum floor area of buildings in these districts was determined by multiplying the total area in each district by the maximum lot coverage for that district. This gave the maximum available floor area of buildings based on a one-story building. According to the town building inspector, most of the buildings in the business and manufacturing districts are one-story. An alternative set of figures was also calculated to reflect the maximum available floor area of buildings as allowed by the zoning code. This was accomplished by multiplying the maximum available floor area for one-story buildings by the maximum number of floors allowed for each zoning district.

Total unit count for residential areas was obtained by summing the unit counts of all residential districts and adding the total unit count from the approved subdivisions. Likewise, total maximum available building floor area was obtained by summing up the values for the business and manufacturing districts. Table 1, **Estimated Build-out for Town of Grand Island**, provides the results of this portion of the analysis.

Analysis of Growth Impact on Community Services

From the total unit counts and maximum building floor area obtained from the previous procedure, the potential impact of build-out on the community could be addressed. The first step in this process was to identify key community services that are most directly and significantly impacted by community growth. Next, multipliers were chosen to quantify the impact. Finally, the quantitative value of each community service for a "built-out" town was compared with current capacities to begin to evaluate impact and identify need.

Analysis of Build-Out Parameters on the Town's Goals and Objectives

The potential impact and need identified in the previous task was then analyzed in the context of the town's goals and objectives, thus identifying growth issues that should be addressed in the comprehensive plan.

Assumptions

Several assumptions were made in the course of the build-out analysis. With regard to the identification of buildable area, hydric soils, as mapped by the U.S. Department of Agriculture Soil Conservation Service, were discounted as constraints. Hydric soils are but one parameter of the U.S. Army Corps of Engineers' method for determining federally regulated wetlands. The other two, water-tolerant vegetation (hydrophytes) and hydrology, must be present to define an area as wetland. However, the presence of hydric soils is a good indicator of wetlands because they result when water is present for long periods during the growing season. The presence of standing water or hydrophytes are not good indicators because large areas of Erie and Niagara Counties have poorly drained soils that are not considered hydric, but do support transitional wetland plant species and will pond water for short periods of time.

State mapped wetlands and wetlands mapped as part of the U.S. Fish and Wildlife Service's National Wetland Inventory (NWI) program were also assumed to be development constraints. State regulated wetlands carry with them some real regulatory constraints. The NWI maps represent wetland determinations based on aerial photographic interpretation. Essentially, vegetation and hydrology are considered but soils are not. Therefore, NWI wetlands may or may not be federally regulated. There is also the issue of obtaining a permit to fill wetlands. Except under the nationwide permitting program that allows fills of less than one acre of isolated or above headwater wetlands for an entire project or subdivision, individual wetland permits are difficult to obtain. Therefore, it is unlikely that large tracts of wetlands, that could effect the outcome of this analysis, would become buildable land.

In summary, the Corps consistently uses the resources identified herein to alert developers of potential wetland jurisdiction. Therefore, it is felt that these mapping resources are valid for the purposes of the build-out analysis.

It was assumed that approved subdivisions would be constructed based on their approved unit count.

It was assumed that 20 percent of the buildable land area in residential districts would be discounted for roads and parking.

Although developed residential parcels may be suitable for subdivision, the analysis assumes that no further subdivision of these parcels will occur. For commercial and industrial parcels, the analysis also assumes that they are fully developed and that no further development will occur.

The analysis also assumes that town development policy and regulations will not be changed in a way which could modify current development patterns.

Build-Out Potential

Table 1 is a tabulation of the results of the build-out analysis. It is a summary of the available buildable land in the Town of Grand Island and a projection of the maximum number of housing units and business and manufacturing gross floor area.

Table 1
Estimated Build-Out for Town of Grand Island

Zoning District	Area of Vacant, Buildable Land	Number of Housing Units	Maximum Buildable Floor Area (current trend)	Maximum Buildable Floor Area (allowed)
With Sewer				
Residential (R-1A)	83 ac.	180	--	--
Residential (R-1B)	380 ac.	1290	--	--
Multi-Family (R-3)	101 ac.	1260	--	--
Business (B-1)	88 ac.	--	1,150,000 sf	3,450,000 sf
Business (B-2)	80 ac.	--	697,000 sf	2,091,000 sf
Manufacturing (M-1)	139 ac.	--	2,422,000 sf	9,688,000 sf
Approved, Unbuilt Subdivision Units	3060			
Sub-Total	871 ac.	5790	4,269,000 sf	15,229,000 sf
Without Sewer				
Residential (R-1A)	2460 ac.	3570	--	--
Residential (R-1B)	290 ac.	420	--	--
Business (B-1)	17 ac.	--	222,000 sf	666,000 sf *
Business (B-2)	16 ac.	--	139,000 sf	418,000 sf
Manufacturing (M-1)	325 ac.	--	5,663,000 sf	22,651,000 sf
Approved, Unbuilt Subdivision Units	50			
Sub-Total	3110 ac.	4040	6,024,000 sf	23,735,000 sf
TOTAL	*3980	9830	10,293,000 sf	38,965,000 sf

* Area of subdivision not included in total buildable land.

Table 1 provides information on the area of vacant buildable land, the projected number of housing units for buildable land in residential districts, the projected maximum buildable floor area for business and manufacturing districts under current development trends (single-story) and the maximum buildable floor area that would be allowed under the current zoning. The area of vacant buildable land was provided in units of acres.

Table 1 is also broken down into three levels of information that can be useful for planning purposes. The first and most detailed level is zoning district. Information at this level allows analysis of those districts that have been most affected by past development and what uses will likely dominate development in the future.

The next level of information is sewer versus no sewer. Table 1 shows that available residential and manufacturing zoned land is most abundant in the portions of town that are not sewered. Development pressure will likely result in increased pressure on the town to provide additional or expanded sewer districts.

Finally, total values are provided to show the larger picture of build-out. These figures become important for generating other growth related parameters, shown in Table 2.

Table 2
Growth Related Impact

Land Use	**Water Supply (mgd)**	**Waste Water (mgd)**		**Traffic Generation (trips/day)**	**Additional School-Age Children**
		Sewer	No Sewer		
Residential	2.00	1.56	1.09	94,000	7,770
Business/Manuf. (current)	1.08	0.43	0.60	72,000	--
Business/Manuf. (allowed)	4.10	1.52	2.37	272,000	--
TOTAL*	6.10	3.08	3.46	366,000	7,770

* Reflects the worst-case scenario.

Table 2 provides projections of additional pressure on the existing infrastructure and services in the town if build-out is achieved. Multipliers used to generate the values in Table 2 came from various sources: Burchell and Listokin, 1980; DeChiara and Kippelman, 1975; DeChiara and Kippelman, 1978; Institute of Transportation Engineers; and Rau and Wooten, 1980. The multipliers used for sewer service are 100 gallons per person per day for residential uses and 0.1 gallons per square foot gross floor area per day for business uses. A value of 110 gallons per person per day was used to determine water usage. The higher value is used to reflect water uses that do not end up in the sewer system (eg., watering the lawn). For similar reasons, wastewater flow for business uses was raised by 5 percent to determine water usage. Traffic generation was determined for residential use by using a value of 9.55 trips per day per dwelling unit. A value of 6.97 trips per day per 1000 feet of gross floor area was used for business uses. Additional school-age children was determined using a value of 0.79 children per dwelling unit. In addition to the data in Table 2, an additional population of 26,500 persons is predicted to occur at build-out. This figure is based on an estimate of 2.7 persons per housing unit, as generated from 1990

Census data. Based on a recreational need of 10 acres per 1000 population, there will be a need for approximately 265 acres of recreational use. Currently the town population is 17,561.

Water supply and sewer service are very important development parameters. This is reflected in the town zoning ordinance where development densities are controlled by whether or not a parcel of land is located within a sewer district. If the entire town is sewered, the build-out results would change. Under the current zoning, development densities could increase. There would likely be an increase in rezoning applications, particularly for R-3 that is only permitted in sewered areas.

The potential increase in traffic generates some important issues, such as current traffic problems and proposed solutions, potential traffic problems, and bridge congestion. Likewise, capacity problems in existing schools will be realized prior to build-out.

Absorption Analysis

By applying building permit data to total unit count and commercial floor area, a projection of the number of years it will take to reach build-out under the current zoning can be made. Building permit data was obtained from the Town of Grand Island Building Department. The average number of building permits issued for residential development for the past five years is 144 units per year. Based on the results in Table 1, it will take approximately 68 years to develop 9830 units, thus achieving residential build-out.

Commercial/Industrial building activity over the past five years was based on gross floor area. The average gross floor area approved in the town over five years is 108,900 square feet (sf) per year. Based on the results in Table 1 for a one-story building, it will take approximately 95 years to achieve commercial/industrial build-out. It was not relevant to project a time frame for commercial build-out under the allowed maximum buildable floor area scenario. Commercial building permits for the past five years are based on single-story construction (in general) and are not a good representation of multi-story development scenarios. Should the future trend lean towards multi-story development, the average square footage per year approved by the town would likely go up.

Build-Out Potential For Proposed Land Use Plan

A rough estimate of the build-out potential for the proposed Land Use Plan was obtained by substituting the densities proposed in the plan (p. 26) for the maximum densities allowed for the greater portion of the residential district under the current plan. Revisions to the total area and proposed densities for Town Center Special Residential and Single-Family Attached Residential have, however, skewed unit counts to the high side (overestimated). In addition, reductions in residential development densities in currently unsewered areas along East River Road resulted in significant decreases in residential unit count and, subsequently, population. Within sewered areas, the estimated number of housing units remained the same as previously calculated in Table 1. However, the low density proposed for the west side of the town significantly reduced the potential number of housing units. Thus, the total additional housing units at build-out for the proposed plan will be less than the estimated 9830 units for the current plan.

The build-out analysis for the current land use plan and zoning regulations for the Town of Grand Island was prepared through time-consuming identification and analysis of vacant, buildable land use polygons. The build-out estimate for the proposed plan, as explained above, was far less detailed and assumed that acreages within each zoning classification will remain the same. Based

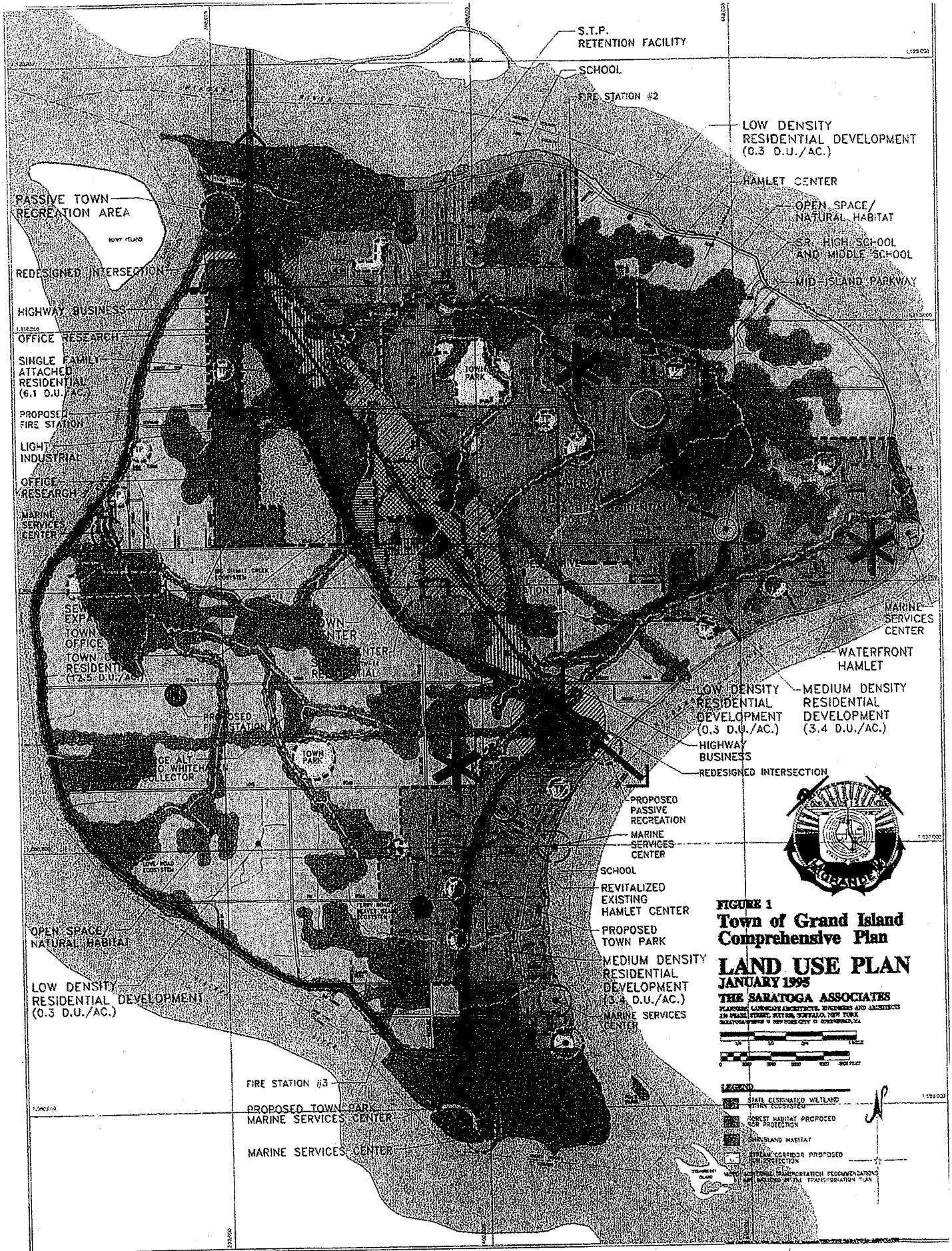


FIGURE 1

Town of Grand Island Comprehensive Plan

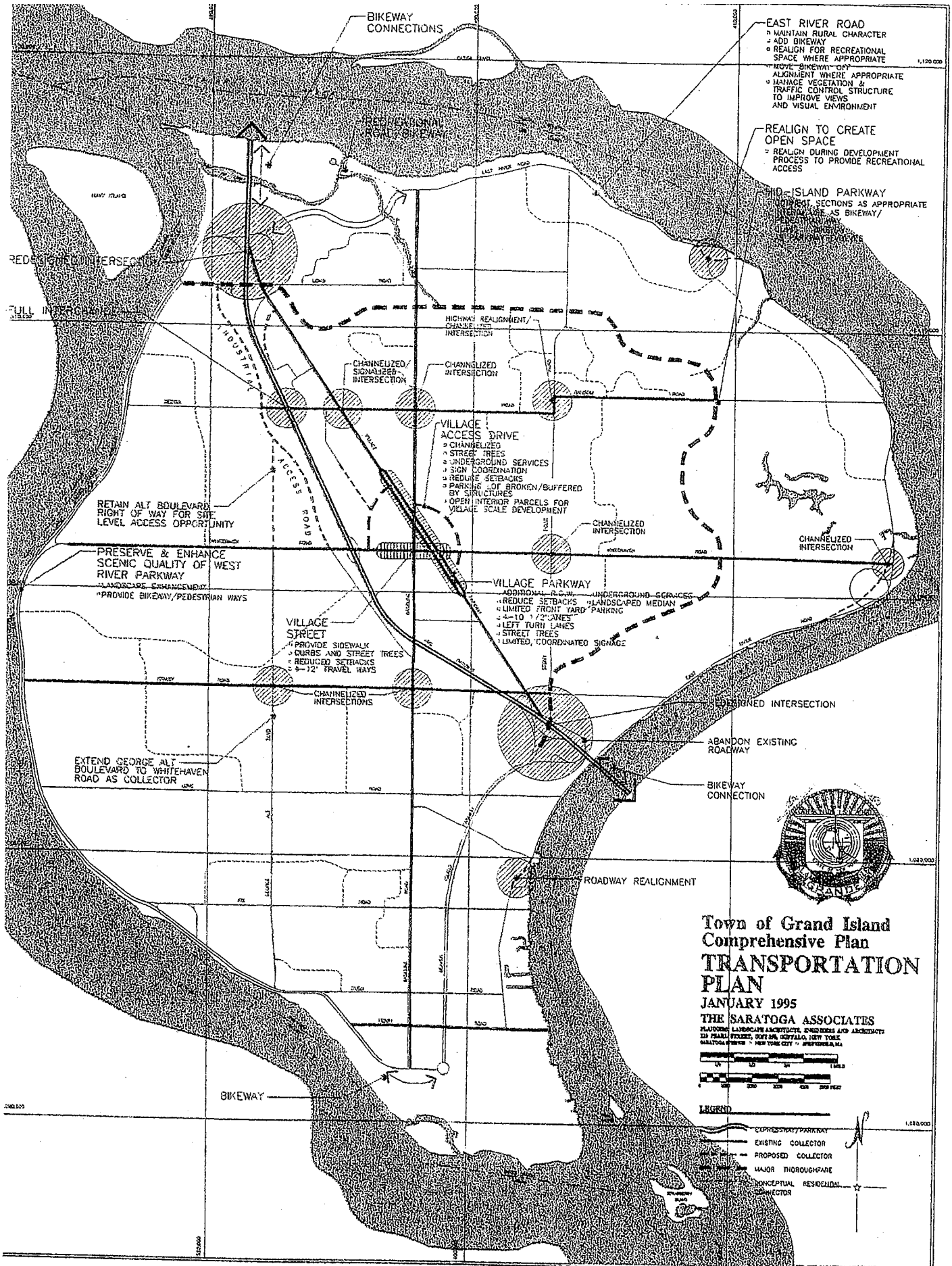
LAND USE PLAN

JANUARY 1995

THE SARATOGA ASSOCIATES

PLANNING, LANDSCAPE ARCHITECTS, ENGINEERS AND ARCHITECTS
218 MAIN STREET, WESTON, BUFFALO, NEW YORK
SARATOGA SPRINGS • NEW YORK CITY • GLENS FALLS, NY

SEE OTHER SIDE FOR TRANSPORTATION PLAN



SEE OTHER SIDE FOR LAND USE PLAN

upon this assumption, it is reasonable to say that the density of development would be less at build-out under the proposed plan than under the current plan.

Impact Analysis

The following analysis describes the impact of a build-out of the vacant parcels identified in this study, in accordance with the town's current development policy as reflected in its Zoning Ordinance. Based on the estimated build-out under the proposed plan, impacts will be less severe than as indicated in the following discussions.

Shoreline

Under current regulatory policy the few remaining opportunities for public acquisition of riverfront access could be lost. Use of the town P.U.D. ordinance could provide some opportunities to gain physical or visual access to the Niagara River in the town's eastern and northeastern areas. The comprehensive plan will evaluate these opportunities for shoreline access and provide concrete recommendations for community action. Any implementation strategy should be strongly based in less-than-fee techniques for acquiring these open space/recreation resources. Such techniques would include acquisition of scenic easements, P.U.D. procedures, SEQRA mitigation measures and acquisition using "in-lieu" recreation fees.

Economic Development

Grand Island economic development could be inhibited by the limited access to the island and growing traffic friction at the river crossings. Since the greatest number of residents commute to employment centers off the island, increased residential activity will further limit economic development and create an unbalanced land use pattern that favors residential uses at the expense of light industrial, office and regional commercial land uses.

Land uses that would find Grand Island attractive under this scenario would be those that had off-peak hour traffic generating characteristics.

Wetlands/Streams

With the exception of the northeast corner of the town, development has not significantly encroached on Federal and State designated wetlands. A number of significant regulated wetlands fall within the area shown as approved subdivisions that, as yet, have not been constructed. The town should be concerned by the treatment of the key wetland resources in these subdivision designs. As development proceeds in the town, increased pressure to utilize wetland areas for development purposes and to circumvent the intent of current wetlands legislation will occur.

Significant development has occurred on mapped hydric soils - key indicators of wetland resources. These developments may have taken place prior to current federal regulatory standards or actual field analysis may have indicated no hydric soils in those areas. The town is aware of current policy and regulations, and includes them in current subdivision reviews. It also has the ability to incorporate wetlands consideration in the re-reviews of existing "paper" subdivisions.

Although stream frontage lots are deeper in some areas, for the most part subdivision design was not heavily influenced by stream location and floodplain. Opportunities for linear greenways

along these features continue to exist, however, throughout the town. These greenways can be used for active recreation, such as cycling and jogging or for passive uses. When developed in conjunction with large community parks, they can provide greenway linkages between facilities or between recreation areas and recreation users.

Vacant Land

Exclusive of those areas that have been subdivided but not developed, the town has 4000 acres of vacant "buildable" land capable of accommodating an additional 6720 new housing units and over 10.2 million square feet of industrial/office and business uses. With the addition of 3110 housing units on lots currently approved by the town but undeveloped, the total housing unit count would jump to 9820 units. Intensive development activity will continue to be focused near the northeast and eastern shore of the town, primarily in areas where the availability of adequate central sewer service mitigates the poor soil conditions. Development at a lesser density would continue in the areas south and west of the interstate.

Transportation

At buildout, vehicle trips on the town's highways will increase by 376,000. The greatest impacts will be on Grand Island Boulevard, Long Road, Bedell Road and Whitehaven Road. These facilities will require extensive improvement to handle increased traffic volume. Additionally, traffic congestion will increase at the Long Road/I-190 interchange, Bedell Road intersections with Grand Island Boulevard, Baseline Road and Stoney Point Road, and at Whitehaven Road intersections with Baseline and Stony Point Roads.

The Whitehaven Road interchange on I-190 will be called upon to handle increased volumes as traffic adjusts to declining levels of service and increasing congestion at the interchanges for the approaches to both bridges.

As transportation improvements along existing town highways are required, they will impinge on existing residential front yards, creating safety concerns at driveways and bringing traffic closer to residential structures, thereby decreasing residential values.

Sewage Treatment

The build-out analysis indicates that the current development policy would permit 5,790 new residential units with 15,633 additional occupants within the present sewer service area. The sewage treatment plant has a rated capacity of 3.5 MGD and currently has average daily flows of 1.8 MGD. The projected build-out potential within the current sewer districts would add and additional 1.5 MGD for residential development and 0.2 MGD for commercial development. Plant capacity should be adequate to accommodate the build-out of the existing sewer service areas. Expansion of these areas may require expansion of the town sewage treatment plant.

Under wet weather conditions, the sewage treatment plant flows exceed the rated capacity due primarily to inflow and infiltration. In 1985, additional retention basins were constructed at the sewage treatment plant to capture the majority of the wet weather flows for treatment after a storm event. Engineering consultants are currently reviewing alternatives for improved operations to maximize flow through the sewage treatment plant and retention basins in an effort to further reduce sewage bypass events.

Schools

The Grand Island School District capacity rating for state aid is 4,665 students. However, the school district estimates that capacity is actually 3,686. State methods for determining capacity result in the inclusion of space not normally used for permanent classrooms. Thus, their figures are generally higher (in this case by 979 students). Assuming that the school district capacity estimates are more realistic and given a current enrollment of 3,265 (1994-1995 Projection) students, there is surplus space for approximately 421 students. The build-out analysis indicates that under current policy, 7,770 students will be generated; enough to eliminate the surplus and create the need for facilities to educate an additional 7,345 students.

Recreation

Although all of its 325 acres of recreation land is not developed, the town provides 18.6 acres of recreation space for each 1000 residents, well above the National Parks and Recreation Association recommended standard of 10.0 acres/1000 population. This figure does not include acreage at each of the four public schools that is used for public recreation purposes. The amount could support a town population of 32,500 people. At build-out, the town population should be 44,000. The population will require 440 acres of developed recreation space; 145 acres more than exists in the town's current recreation inventory. This analysis assumed that all of the recreation acreage in the town's inventory and the acreage that may be acquired in the future is "buildable". Further, the analysis does not include open space preservation or linear recreation (trails).

Conclusion

The build-out analysis presents a picture of a town that can and will undergo significantly more development. Indeed it is positioned within the Buffalo/Niagara Falls metropolitan complex for increased growth. The pattern of land use that has evolved to accommodate growth is one typical of suburban sprawl. Significant characteristics of this type of growth are strip development of rural roads with residential uses, development in greater depth where utilities and highway access permit, clustering of industrial and office uses around the intersections of major roadways, the loss of the historic character of the community, and a loss of open space and recreation opportunities. Grand Island is in a position to take positive action to modify the trend in its land use. The community comprehensive plan and its implementation package should be developed to accomplish that end.

Finally, the build-out analysis is predicated on the assumption that none of the buildable land will be preempted by institutional (schools, churches, service clubs, etc.) or recreational uses (parks, open space, hunting preserves, etc.).

V. COMPREHENSIVE PLAN

The Grand Island community has expressed a desire to become a complete town, capable of offering its residents employment opportunities, public services, recreational facilities, shopping areas and a pleasant place to live. In addition, the Grand Island community enjoys a rural character that it seeks to maintain as it accommodates growth. This presents the community with a challenge to adopt a plan that will both accommodate and manage growth, while aggressively preserving its essential rural and residential character.

Figure 1, Land Use Plan, is the plan developed to guide Grand Island in addressing current and future planning opportunities and issues. In order to reinforce the relationship between the land use and transportation elements of the plan, major elements of the Transportation Plan (Figure 5) such as the Mid-Island Parkway have been duplicated on the Land Use Plan. This section of the comprehensive plan provides an overview of the plan and a discussion of its components, grouped into three major topics: land use, transportation, and community facilities.

The Land Use Plan and descriptive text recommend the development of a neighborhood scale master plan for Ferry Village. This effort was completed with the adoption of the Ferry Village Master Plan in 1998 as a document integrated with a draft generic environmental impact statement. The planning elements of the document are included in this plan.

Plan Overview

In principle, the draft plan is consistent with the plan prepared by Candeub, Fleissig and Associates in 1969; it emphasizes concentrated development of the central corridor of the town and provides for less intensive residential areas northeast and southwest of this corridor. The central corridor is centered on Grand Island Boulevard and has connections to the New York State Thruway at the Boulevard, Whitehaven Road and Long Road. The 1969 plan reflects a strong growth attitude, characteristic of that era. The pattern of growth it encourages can best be characterized as "suburban sprawl." The classic sprawl land use pattern is characterized by residential areas with little or no variety of housing types and unbroken by green spaces. Commercial uses are located in strips along major roadways and the community lacks an identifiable center. Industrial and office parks cluster at interchanges between major roadways and limited access elements of the interstate highway network.

The draft plan redefines a basic land use concept that emphasizes preservation of the town's rural and open character. It seeks to accomplish this by first establishing an extensive open space network throughout the town. That network is defined by the physical characteristics of the town, and can provide passive recreation opportunities while managing critical natural resources and maintaining the rural character residents value. The open space network also serves to define boundaries between intensive uses and provide buffering between incompatible uses.

The plan features a strong community center located at the intersections of Baseline, Whitehaven and Grand Island Boulevard. The focal point of the community center will be the municipal building, firehouse and future village green. The community center will be the focus of governmental, commercial and service activities for island residents. This complex will be surrounded by mixed-use development which incorporates village-scale commercial uses, higher density residential uses and village-scale offices. Village-scale planning design criteria and guidelines will shape growth in this area. Neighborhood commercial uses will be accommodated within "hamlets" located at the intersections of East River Road and Whitehaven Road, Ransom and Stony Point Roads and on Love Road near Beaver Island Parkway. Highway commercial uses, those requiring direct highway access and relatively large

parcels for their economic viability, will be sited at either end of the boulevard where they will have good access to the Thruway interchange and bridge approaches.

Residential densities and housing types are coordinated with the location of central sewer service areas. A large portion of the west side is proposed to remain unsewered to accommodate low density development. Higher density residential development, designed to provide a wider range of affordable housing opportunities and to support the village center concept, will be located at the periphery of that center and extend to the Northwest along Grand Island Boulevard.

The plan recognizes the need for a diversity of land uses to meet the economic development needs of the community. Not only does it provide for a diversity of housing types to accomplish this, it also provides for an adequate supply of land designated for light industrial and office uses. These areas, differentiated as light industrial areas, have good access to the Thruway interchange and Office/Research areas with campus-like visual appearance and light truck traffic generation characteristics. Office and research uses are designed to support the town center concept east of the Thruway and act as a transitional use or buffer between light industrial and residential uses west of the Thruway. Light industrial and office land use areas east of the Thruway are served by central water and sewer service. Town Center Office is a third type of economic land use designed to support the town center concept by providing village-scale offices.

Major improvements to the roadway system in the town include a Village Access Drive to provide access to expanded village-scale commercial activities in the town center, thus promoting a village atmosphere; a Mid-Island Parkway connecting Beaver Island Parkway with Long Road at its intersection with the Thruway; and extensions of Alvin Road north through the light industrial area to pick up traffic from the industrial operations and connecting to Long Road at the northern most Thruway interchange. The future Mid-Island Parkway Extension would relieve traffic on East River Road and allow that road to function as a low volume, scenic road. It will collect traffic from current and future residential developments in the northeastern areas of the town and funnel it to the either end of Grand Island Boulevard. The plan also calls for the extension of George Alt Boulevard northward to Whitehaven Road as a residential collector street, as rural development occurs on adjacent parcels.

The plan also shows the development of additional town parks and bikeways/paths. These sites were chosen based on the recommendations of Kotz and Associates, who conducted a recreation study for the town concurrent with the Comprehensive Plan.

Each component of the comprehensive plan serves a specific function in guiding the growth of the town so as to achieve community goals and objectives. The remainder of this section is a detailed discussion of each of the plan's components and its function within the overall plan.

Natural Environment

The Town of Grand Island is indeed a unique environment. It is an island surrounded by the Niagara River, thus, isolating it from the extreme pressures of urban sprawl that have engulfed much of the surrounding towns. This has resulted in a town with vast areas of open space; a rural setting in an otherwise urban environment. The level of growth on the island is somewhat controlled by the capacity of the Grand Island bridges. However, the town is coming under considerable development pressure. Most of the land within the town is privately owned. Currently, the town's only options for controlling development of privately owned land are zoning, subdivision regulations and the site plan approval process. The town comprehensive plan serves as a tool for establishing the regulations necessary for controlled growth. The key to maintaining the rural atmosphere of the town is to maintain natural open space. This comprehensive plan recognizes the town's natural resources and the need to maintain them.

The Town of Grand Island has 22 miles of shoreline. Wooded areas along the shoreline provide resting areas for migrating ospreys and bald eagles. Many animals use and depend upon the shoreline for their survival. Fish spawn in grassy shallows and in the streams that are tributary to the river.

The flat topography and prevalence of poorly drained soils in the town provide excellent conditions for the development of wetlands. There are a number of New York State regulated wetlands in the town, as well as many smaller wetlands that would likely fall under federal jurisdiction. Many wetland systems provide extraordinary habitat, especially those that have a mixture of vegetation type and varying depths and periodicity of flooding. Many small wetlands are flooded for only short periods of time in the spring, yet they are extremely important food production areas for waterfowl. The shallow water in these wetlands warms quickly, allowing the growth of algae and small plants before many other larger bodies of water have cleared of ice. These vernal pools are also home to many amphibians in the early stages of their life cycle.

In addition to damp places, the town possesses many areas of good quality upland habitat, mostly in the form of woodlots. The general benefits of woodlots include valuable wildlife habitat, improvement of air and water quality, reduction of erosion, a buffer to noise and development, modification of the urban climate, and preservation of the rural atmosphere. The Inventory and Analysis document for Grand Island identifies and discusses significant habitat, regulated wetlands, and other important natural resources of Grand Island.

In order to preserve natural resources for all the reasons previously stated in this section, the following is recommended:

- Preserve wetland areas through existing state and federal regulations.
- Identify and preserve significant habitat at a site planning level.
- Preserve shoreline habitat, particularly woodlots, wetlands and vegetated shallows.
- Provide greenways along streams to preserve water quality, link upland and wetland habitat, and provide recreation opportunity.
- Preserve significant upland habitat, including woodlots identified by NYSDEC.
- Consider unique methods of preserving open space and encourage resident leadership and participation in efforts to inventory the town's natural resources.
- Consider opportunities to incorporate recreation and environmental research industries into the town's plans for economic growth to reduce the need for less desirable development.

The comprehensive plan recognizes the need to preserve natural resources. Potential wetland areas have been incorporated into the plan. Other wetland areas probably exist in the town. They will be regulated during site analysis for development projects. The plan also recognizes the importance of the West River shoreline and previously undeveloped areas of the East River shoreline. Stream banks are proposed as greenways that will serve to link important habitats and provide opportunity for linear parks. Finally, important wooded upland areas identified by NYSDEC are also shown as proposed natural open space. These areas occur primarily on the west side of the Thruway and fall into the following categories defined by the state:

Upland Forest Habitat - These are mature or maturing forests which were evident on 1938 photographs. These forests are important habitat for forest bird species and much of the native plants of the Island. These forests are probably remnant habitats for reptile and amphibian species which are also native to the Island. These forests are important biological reservoirs containing populations and seed stocks critical for any re-establishment of upland forests. This habitat is critically imperiled on the Island.

Stream Corridor Habitat - This habitat includes vegetated stream banks and connects upland forests and wetlands to each other and the River. This habitat is important in that it provides a natural travel corridor for many species during migration and dispersal. Such a corridor may allow a species to reoccupy a depleted forest or wetland habitat. If allowed to remain vegetated, these corridors can decrease pollution of streams by intercepting and filtering silt, floatable wastes and other pollutants from adjacent lands. Vegetation within these corridors can provide shade to help maintain suitable water temperature for aquatic species. Many of the streams within these corridors are important northern pike spawning habitat.

State Regulated Wetland - These wetlands are important habitat for many wildlife and plant species, especially reptiles, amphibians and forest birds. In addition they serve other important functions such as storm water storage and filtering.

Six ecosystems have been identified by the NYSDEC and have been designated on the Land Use Plan, (Figure 1). These include the Gun Creek, Woods Creek, Spicer Creek, Ferry Road, Beaver Island-Love Road and Big Six Mile Creek systems. The full range of preservation options listed above should be considered for the management of these areas.

Residents of the Town of Grand Island are very concerned about the future of their town. They do not wish to see their town develop uncontrollably. They appreciate their environment and wish to see its resources preserved. Efforts should be taken by town officials to inventory natural resources, but more importantly to understand the quality of those resources. The documentation and public involvement during the comprehensive plan process is a valuable starting point.

Land Use

The Land Use Plan, (Figure 1), is composed of several land use components that are specific to the town's current character and the way it envisions itself in the future. Land use types are specific to the needs of residents and the types of business or industry the town will attract. For example, many people are attracted to the town for its rural character; therefore, there are low density residential development, open space and natural habitat components. Light industry and office uses are also attracted to this area: therefore, land use components were created to fit these needs and to ensure a balance between uses that generate service demands and those that generate excess revenues. Land use patterns (positioning of land use types on the Grand Island landscape) shown on the comprehensive plan are a function of the locational requirements of each component, utility considerations and the town's vision of the future.

Each of the land use components to follow are discussed in terms of their characteristics and functions.

Town Center - This is the area that will develop into the focal point of the community. It is anchored by the Town Hall, where residents come to participate in the affairs of local government, purchase licenses and permits and gather information regarding the community. It is centered on the intersection of three major thoroughfares in the town: Grand Island Boulevard, Baseline Road and Whitehaven Road. This comprehensive plan envisions a Town Center with the following characteristics and functions:

- A "village green" surrounded by intensive commercial and residential uses
- Traffic directed through the center on a system of Village Access Drives.
- Baseline and Whitehaven Roads and Grand Island Boulevard become landscaped streets with on-street parking, where appropriate.
- Speed limit would be reduced.
- Community retail shopping, business and professional offices, higher density residential and entertainment development encouraged at its periphery.
- Signage and lighting regulated.
- Street tree plantings and other landscaping required.
- Structures dominate and define space.
- Parking lots broken up by buildings and landscaping.
- Necessary through roads (Grand Island Boulevard and Baseline Road) redeveloped as landscaped boulevards.
- Consistent architectural design themes.
- Utilities below grade.
- Landscaped pedestrian plaza encouraged.
- Pedestrian walks and bikeways criss-cross the center and provide access to other areas of the town.
- Prime location for community services such as library facilities.

Figure 2, Town Center Streetscape, is an example of how the Town Center streetscape will look in relation to multi-family residential development.

Town Center Commercial and Town Center Office - A village-scale commercial area would envelope the northeast and southeast sides of the Town Center and support the types of uses encouraged in the Town Center. Office uses would be located on the west side of the Town Center along the Thruway. The characteristics of this area include:

- Compact "village-scale" development with highly organized urban spaces and mixed uses.
- Radial development from the Town Center.
- Town Center Commercial offering "everyday" services such as grocery stores, pharmacies, hardware/home improvement stores, personal services and discount stores.
- Provide opportunities for affordable housing options integrated with other uses.
- Town Center Office uses providing a buffer between the Thruway and Town Center Commercial and Town Center Residential uses.
- Higher density development in Town Center Office than Office Research uses outside the Town Center.
- Serviced by well landscaped major thoroughfares (similar to Figure 2).
- Uniform sign format and design.
- Underground utilities.
- Unified architectural design theme.
- Served by a network of pedestrian spaces and walkways.

- Integrated into the town's open space and recreation network.
- Parking provided in small lots or lots broken up by landscaping and buildings.
- Grade separated pedestrian links across major thoroughfares.
- Pedestrian linkage to the surrounding Single-Family Attached Residential and Office Research areas.
- Open space that buffers Town Center Commercial and Town Center Office uses from adjacent incompatible uses.
- Curb cuts along Whitehaven Road, Grand Island Boulevard and Baseline Road limited and, where appropriate, serving multiple uses.

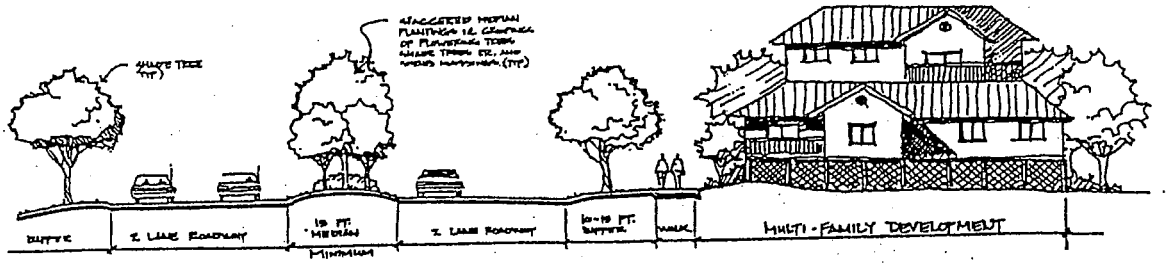


FIGURE 2 TOWN CENTER STREETSCAPE
(Illustrative Sketch Section)

Hamlet Development - A hamlet is a small rural-scale neighborhood commercial center capable of supporting the everyday needs of the residents. Hamlets may function as service centers for residential neighborhoods, particularly when travel to the Town Center is inconvenient. Three hamlets are proposed for the town. They would service the east, south central and north sides of the town, as shown on Figure 1. Characteristics of each of the hamlets would be influenced by their location, surrounding development and their historic significance and will include:

- Development of individual commercial businesses that offer everyday items but are not capable of supporting town-wide demand. Such businesses would include convenient grocery stores, pharmacies, and restaurants.
- Utilization of a special feature, e.g., the riverfront, to attract business.
- Convenient location for easy and quick access.
- A neighborhood center appearance and function.
- Smaller structures and landscaped space in keeping with the residential character of the surrounding neighborhood.
- Linkages to residential neighborhoods through a system of bikeways and sidewalks.

Special consideration will be given to the Love Road Hamlet Center where the size and character of commercial uses will be kept at current levels while improvements are encouraged in the visual quality of commercial development.

Low Density Residential - This land use will continue to dominate the west side of Grand Island and will offer residents a rural atmosphere. Development pressures will be considerably less due

to the lack of central sewer, which in turn controls development density. Existing and suggested densities for this land use are provided in Table 3. Characteristics of this land use include:

- Large lot regulations.
- On-site waste disposal systems.
- Opportunities to purchase large tracts of land.
- Low volume roads.
- Preservation of large areas of significant environmental resources for open space and passive recreation uses.
- Cluster subdivision without central sewer systems encouraged as a method for creating an open space network, preserving unique resources and maintaining the rural atmosphere.
- Development of a well defined trail and bikeway network focused on environmental resources, the scenic amenities of the West River and activities in the Community Center.
- Preservation of the open and rural landscape by encouraging specialty agriculture and related economic activities.

TABLE 3

EXISTING AND SUGGESTED RESIDENTIAL DENSITIES

Land Use Category*	Current Density			Suggested Densities		
	SF/Unit	Gross Units/Acre	Net Units/ Acre	sf/Unit	Gross Unit/ Acre	Net Unit/ Acre
Medium Density Residential	12,800	3.4	2.6	12,800	3.4	2.6
Low Density Residential	N/A	N/A	N/A	120,000	.4	.3
Single-Family Attached Residential	3,500	12.5	9.3	7,200	6.1	4.5
Town Center Residential	N/A	N/A	N/A	3,500	12.5	9.3

* All Land Use Categories except Low Density are recommended for central sewer and water service areas.

Note: Units/Net Acre is calculated by adjusting the gross acreage by 25% for roads and recreation space.

Medium Density Residential - This land use also corresponds with existing and proposed sewered areas, primarily including the interior of the east side close to the Town Center and existing residential areas in the southeast portion of town. Opportunities exist for the siting of residences in a strong neighborhood setting. Development density is suggested as 3.4 dwelling units per acre, providing opportunity for smaller and more affordable lot sizes in single-family residential

neighborhoods than that proposed for the west and east waterfront portions of the town. Existing and suggested densities for this land use are provided in Table 3. Characteristics of this land use include:

- Prevalence of residential uses on central water and sewer systems.
- Maximum flexibility for providing a wide variety of housing types and affordability.
- Stringent landscape requirements, street trees and lighting.
- Provision of sidewalks and path/bikeways.
- Preservation of significant open space features and sensitive environmental resources through the use of mandatory cluster provisions, where appropriate.
- Maximum opportunities for mixed use, planned unit development that will integrate residential and non-residential uses.
- Use of utility corridors for linear open space and recreational uses.

Town Center Residential, Special Residential and Single-Family Attached Residential - These land uses support the needs of residents that appreciate the convenience of apartment or low-maintenance condominium living. Singles, couples, and couples just beginning families make up a large proportion of people who desire apartments or other multi-family units. Generally speaking, high density residential developments are best situated near shopping opportunities. Additionally, people who enjoy the freedoms an apartment offers also enjoy the convenience of having shopping and entertainment close by. The comprehensive plan reflects this concept by locating town residential and single-family attached residential uses adjacent to the town center and Town Center Commercial land uses. Town Center Residential is the highest density land use and will likely support a limited number apartment developments in close proximity to the town center. The Single-Family Attached Residential areas are approximately one half the density of Town Residential and would likely support townhouse and duplex style development. Town Center Special Residential uses are designed to meet the special needs of senior citizens and others with unique housing needs. They are located in close proximity to services and shopping opportunities. Existing and suggested densities for these land uses are provided in Table 3. Characteristics of these land uses include:

- Village-scale development in Town Center Residential and Special Residential areas.
- Prevalence of moderate density, low rise rental and condominium units with off-street parking.
- Direct access to Town Center Commercial and Town Center for convenient shopping.
- Convenient access to Thruway.
- Stringent review of architectural features.
- Underground utilities.
- Setback from major thoroughfares outside the town center area.
- Adequate landscaped buffer provided to reduce the adverse noise and visual impact of highway locations.
- Well developed open space system featuring smaller, urban scale spaces that relate and connect to the open space network in adjacent medium density residential areas.
- Buffered from incompatible uses by open space elements that protect, where possible, significant natural features such as streams.
- Highly organized spaces linked with pedestrianways.

Within Town Center Special Residential areas, emphasis is placed on extended care facilities based on flexible densities and density averaging. Overall, densities for this area would be lower than in other Town Center Residential areas.

Highway Business - These uses are located near the Staley Road and Long Road interchanges with the Thruway to support the needs of travelers and promote easy access. Vehicle related businesses are encouraged to develop in these areas. Characteristics of this land use include:

- Comprised of automobile and auto-related establishments such as repair shops, gas stations, automobile dealerships, and parts stores, among other related businesses.
- Generally requires considerable parking and/or storage space, as in the case of automobile dealerships.
- Accommodates economic activities that rely on highway exposure for economic survival.
- Features that require extensive storage yards with low revenues per square foot.
- Accommodates retail uses that are not favored in a village setting.
- Establishes visual screens between incompatible adjacent uses.
- Highway landscaped with street trees but no landscaped median (see **Figure 3, Highway Business Streetscape**). Visual buffer should be required.
- Linking of adjacent parking lots encouraged.
- Setbacks adequate for highway expansion.
- Curb cuts limited and combined accessways encouraged.
- A system of marginal access roads designed and developed.

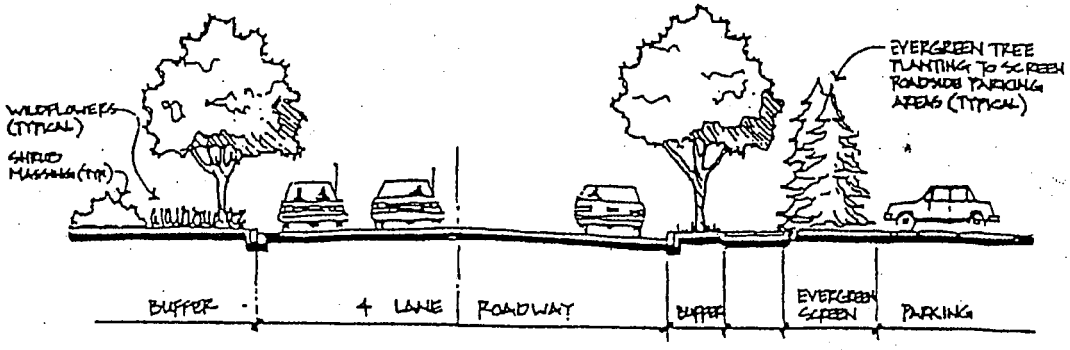


FIGURE 3 HIGHWAY BUSINESS STREETSCAPE
(Illustrative Sketch Section)

Office Research - Office Research uses are planned for the north-central portion of the town, adjacent to the village commercial area and the Thruway, and on the west side of the town, between residential areas and industrial land uses. The campus-like visual quality provides a natural extension of the village atmosphere and provides a logical transition to more extensive light industrial areas west of the Thruway. Characteristics of the Office Research land use include:

- Comprised of corporate headquarters, offices and research facilities in a campus setting.

- Can accommodate light manufacturing operations that do not require frequent deliveries or shipment via heavy trucks.
- Generally clean operations, however, research facilities may use hazardous materials in small quantities as part of research projects.
- Well designed campuses include landscaping and open space. Some may include recreation facilities.
- Traffic generation is heavy for the morning and evening rush hour but there is little heavy truck traffic.
- Architectural review will ensure an attractive visual image for the town and compatibility with adjacent uses, particularly town center uses. **Figure 4, Land Use Separation,** shows buffering between office and residential uses.
- May include one or more Foreign Trade Zones.

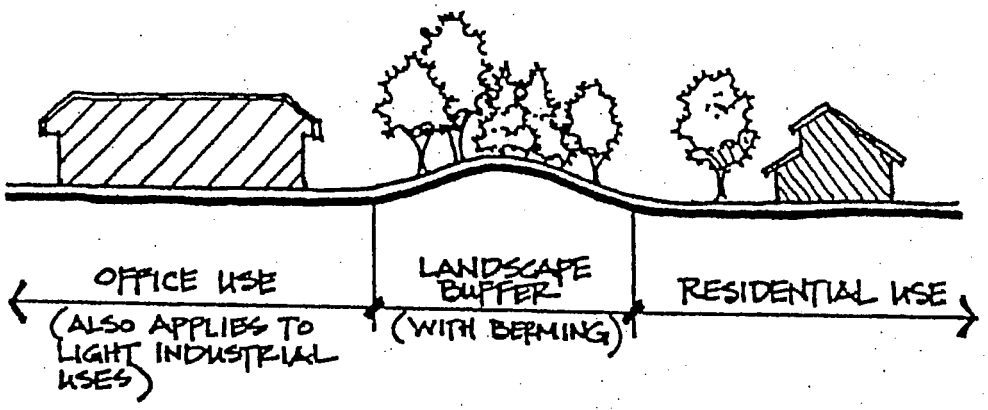


FIGURE 4 LAND USE SEPARATION
(Illustrative Sketch Section)

Light Industrial - The plan provides an extensive area of light manufacturing on the west side of the Thruway. Industrial development provides an important source of employment on the Island. Characteristics of this land use include:

- Development of infrastructure necessary to support designated uses including pre-treatment of certain wastes.
- Comprised of light manufacturing industries that produce such things as equipment controls and electronic components. This is opposed to heavy manufacturing that would include such industries as steel and chemicals.
- Limited heavy trucking and similar traffic generation as Office Research.
- May require use of some hazardous materials.
- Collector roadways and interior service drives be developed to reduce the impact of industrial development on adjacent roadways and residential areas.

Marine Services Center - This land use was created to encourage development of the town's Niagara River recreational resource as part of its overall economic development strategy, and to

provide water-oriented recreation facilities for residents. Given the apparent demand for boat slips and opportunities for river access, several areas have been designated for this use. Many are currently in operation as service centers. Characteristics of this land use may include:

- Marine Service Center areas consistent with recommendations of the Horizons Waterfront Commission.
- Shoreline developed with bulkhead, dredged and artificially protected harbor providing numerous docks and slips and a boat launch.
- May be in private or town ownership.
- Adequate parking area for vehicles and trailers.
- Restaurants, concession stand type businesses, and tackle shops may be associated with Marine Services Center.

The Town should explore the potential for cooperation with the New York State Office of Parks, Recreation, and Historic Preservation as a vehicle for establishing Niagara River access at Ferry Village. This project might be undertaken as an element of the Town Park recommended for the southern end of River Road just north of the State's East River Marina.

Town Park - Parkland is very important to a community, especially in highly developed areas. Several existing and proposed town-owned parks are shown on the comprehensive plan, located to service residential developments or in association with bikeways/paths. Characteristics of this land use include:

- Passive or active recreation development. Passive uses would include open lawn or fields, hiking trails, and similar unorganized areas. Active uses would include such things as ball diamonds, soccer fields, ice skating rinks, and swimming pools.
- Size and type of parks are dependent upon location and the availability of land. Smaller parks may service a neighborhood. School recreation facilities may be suitable for neighborhood parks. Larger parks may service several neighborhoods and provide greater recreational opportunities.
- Greater detail on the Grand Island park system is presented in a study prepared for the town by Kotz and Associates.

Additional study of the proposal to create a Marine Service Center in the southwestern corner of Buckhorn Island State Park indicated that boat launching may not be practical at that location. The Land Use Plan, therefore, recommends that a passive recreation area be established at that location.

School - This land use plays a vital role in the community as it provides educational services to the residents of the community. The school system is currently capable of handling the student population. However, as the town grows there will be greater demands on building space and resources. The comprehensive plan shows existing school sites and one recommended site at the east end of Whitehaven Road. Characteristics of this land use include:

- Relatively large sites, much of them used for recreation programs.
- Unlike inner city schools, most students are bussed to school. The development of a town-wide trail system should focus on providing alternatives to this mode of transportation in an effort to extend school usage for recreational purposes.
- Serve as locations for evening adult education and recreation activities, as well as community meeting and polling places.

Open Space - Open space, as shown on the comprehensive plan, includes the trail systems, stream corridors, woodlots and potential wetland areas. Significant stream corridor and wetland habitats designated by NYSDEC are included in this land use category. However, open space also includes designated areas in development projects that occur in any of the various land uses. Open space is discussed further in the Recreation and Natural Environment sections of the comprehensive plan. Characteristics of this land use may include:

- Essentially, undeveloped land upon which there are no structures.
- Supports the preservation and management of unique or significant natural, cultural or historic resources.
- Within intensely developed areas, open space takes the form of landscaped plazas and pedestrianways.
- Implemented through a number of management techniques, including conservation easements, cluster design, overlay zones, dedications and assisted purchases. Not-for-profit land trusts may also play a significant role in preserving open space.
- Supported by establishing specialty agricultural uses.

Potential open space areas designated on the Land Use Plan (Figure 1) will require a site level analysis of physical characteristics and desirability prior to acquisition or conversion to more intensive uses.

Transportation

The existing and potential traffic problems facing the residents of Grand Island are presented in the Inventory and Analysis (The Saratoga Associates 1991). Traffic flow is a critical issue in the Town of Grand Island. Residents are concerned about traffic on the major thoroughfares and along East River Road where scenic views and private recreational use of waterfront property are in conflict with increasing traffic volumes. The primary issues that trouble residents and town officials are congestion on the Grand Island bridges and accommodating growth without creating congestion on the local road system.

This section deals with improvements to the existing road network and involvement in regional planning activities, as they relate to the town, that would help alleviate both existing and anticipated transportation problems. The proposed **Transportation Plan** is shown on Figure 5.

Grand Island Bridges - The Grand Island Bridges are operated by the NYS Thruway Authority. The bridges are the sole means of access to the island. At present, only the South Grand Island Bridge is at design capacity and operating at a substandard level of service. Projections for 2010 suggest that both the North and South Grand Island Bridges will be operating at substandard levels of service (Refer to Level of Service chart on pages 5 and 6). Unfortunately, the town has no direct control over capacity building improvements to the bridges and, therefore, cannot implement improvements itself. It is likely that the problems will continue into the near future, but efforts are being made to study and solve the bridge problem.

Town growth management policies need to reflect a sensitivity for balancing growth with present capacity and peak hour traffic characteristics of both bridges. Those policies must remain in effect until such time as additional capacity is provided or other viable alternatives for moving people and goods over or around the Niagara River are developed.

The Niagara Frontier Transportation Commission (NFTC) is currently preparing a transportation master plan for the region that will use 2010 as the design year. One solution proposed to reduce traffic going over the bridges is to connect the LaSalle Expressway with Interstate 290.

However, the town does have a vehicle for providing significant input to regional transportation planning that may initiate activities to solve this taxing problem. The town's participation in the Metropolitan Planning Organization (MPO) will contribute to thorough discussion of the issues, and eventually, action to mitigate the regional problem which adversely effects town residents. Issues to address would include additional capacity on the present bridges, alternatives which siphon traffic off the interstate system prior to crossing Grand Island and the construction of a bridge dedicated to local traffic. This latter measure might connect the island to Tonawanda via a bridge which links local collector roads and would carry local traffic only.

As part of this regional highway planning process, the plan recommends that studies be undertaken to test the suggested improvements at the Thruway interchanges with Long Road and Grand Island Boulevard (south) including:

- Improvements to the Long Road-Grand Island Boulevard interchange that integrates Grand Island Boulevard and the northern end of the proposed loop road into the Thruway interchange traffic pattern.
- Redesign of the Grand Island Boulevard interchange, emphasizing resident needs and providing for a direct linkage between the planned loop road and the Beaver Island Parkway.

The plan further recommends construction of a Thruway interchange with Bedell Road. This interchange will increase the accessibility of Office Research uses on the east side of the Thruway, reduce traffic congestion along Grand Island Boulevard and promote economic development of the Light Industrial area west of the Thruway.

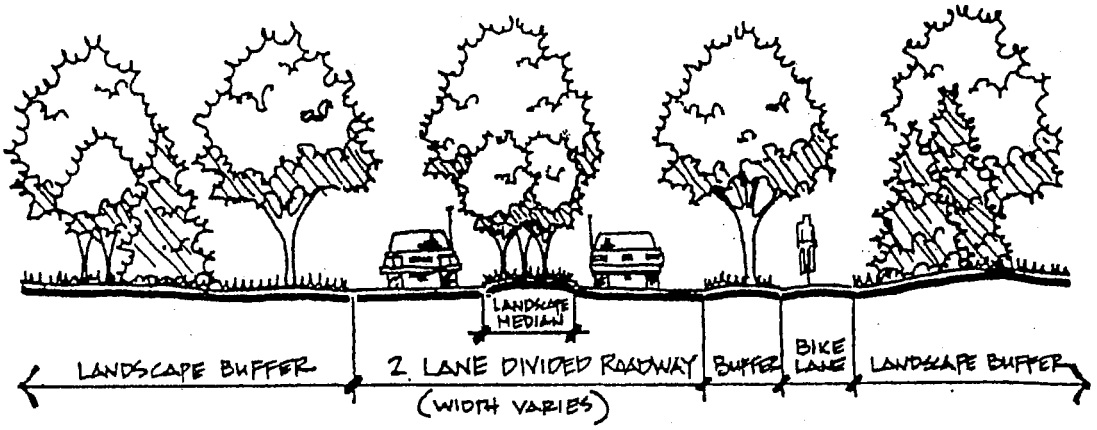
Village Access Drive and Mid-Island Parkway - Figure 5 proposes two roads to reduce traffic volumes on adjacent streets. As part of the concept of creating a town center, a Village Access Drive is proposed to modify traffic patterns along Whitehaven Road between the Thruway and the intersection of Grand Island Boulevard, as Town Center Office and commercial areas north of Whitehaven Road develop. This accessway would be provided as part of the development process, and would be designed to provide access to parcels that have poor or limited access to existing roads. Baseline Road maintains its role as a carrier of through traffic and would be turned into a village parkway with landscaped medians and a reduced speed limit. Grand Island Boulevard will maintain 4 lanes but be designed as a divided highway with a wide landscaped median extending beyond the Town Center into the Town Center Commercial area. Extensive landscape treatments featuring street trees would reinforce the parkway concept and integrate the roadway with the village atmosphere found in the town center and commercial areas. Whitehaven Road would be visually enhanced as a village street with suitable street trees.

An additional Mid-Island Parkway is proposed to alleviate traffic on East River Road. This road appears in different forms in the 1969 Comprehensive Plan and on the 1971 Official Town Map. Candeub, Fleissig and Associates suggested aligning the loop road with the eastern end of Long Road. This alignment carried the road eastward and to the south crossing Ransom and Whitehaven Roads before turning westward to intersect Staley Road near Stony Point Road. The 1971 Official Map, however, shows the loop road extending from Grand Island Boulevard (from a point about 1500 feet south of Long Road) and connecting to the boulevard again just north of Staley Road. The alignment shown on Figure 5 was selected in an effort to balance transportation

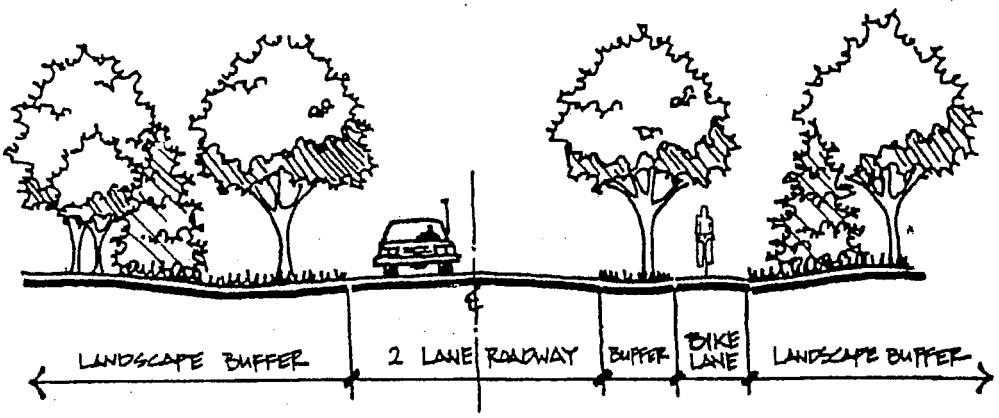
needs with environmental concerns and existing development. This alignment will direct traffic to the North and South interchanges at the bridges. The North alignment will link directly into the intersections of Long Road, Grand Island Boulevard and the Thruway interchange. At the South end, the loop road will be aligned with Beaver Island Parkway and connect directly to the Thruway via a redesigned interchange. This will alleviate current congestion on Staley Road, and provide for an integrated local road system. Access will also be available to Staley, Whitehaven, Baseline, Stony Point and Ransom Roads. The primary benefit of the loop road will be to alleviate traffic on East River Road heading to and from the bridges, and to distribute traffic to elements of the current road system effectively.

Implementation of the concept will occur by setting aside adequate right-of-way during the subdivision review process. Design standards will provide a controlled access roadway characterized by a landscaped median, preservation of existing vegetation and the inclusion of street trees where appropriate. Use of the reserved right-of-way would be for open space and for linear recreation, primarily cycling.

Figure 6, Mid-Island Parkway Alternatives, shows two design alternatives for parkway design. Both alternatives include a 2-lane roadway and a Class I bicycle path. They differ in that the first alternative includes a landscaped median. Both scenarios could be incorporated into the design which would include the median over designated sections of the road.



ALTERNATIVE 1
TWO-LANE ROAD WITH MEDIAN



ALTERNATIVE 2
TWO-LANE ROAD WITHOUT MEDIAN

FIGURE 6
MID-ISLAND PARKWAY ALTERNATIVES

Improvements to East River Road are proposed to eliminate dangerous curves and to increase scenic beauty and recreational access. An example of these improvements is shown on **Figure 7, East River Road Streetscape**. Specific improvements include:

- Realignment at its intersection with Colony Road to eliminate the "S" curve as shown on **Figure 9, East River Road Realignment**.

- The addition of a pedestrian/bikeway linking the existing facility along Beaver Island Parkway with the bikeway recommended through Buckhorn Island State Park.
- Enhancement of scenic views by selective cutting of existing scrub vegetation, and the addition of new screen landscaping to reduce the intrusion of cyclists into private yards.
- Realignment of the roadway immediately south of Whitehaven Road in order to soften the horizontal curve and create passive open space along the river at this scenically significant location.
- Channelize its intersection with Whitehaven Road as development occurs north and south of the intersection.
- Realign approximately 3000 feet west of Kirkwood Road. This realignment should be part of a future development proposal for this area and include the intersection of the collector road proposed as a link between East River Road and the loop road.

Every effort would be made to maintain the rural character of East River Road while recreation, scenic and functional improvements are made to this important highway feature.

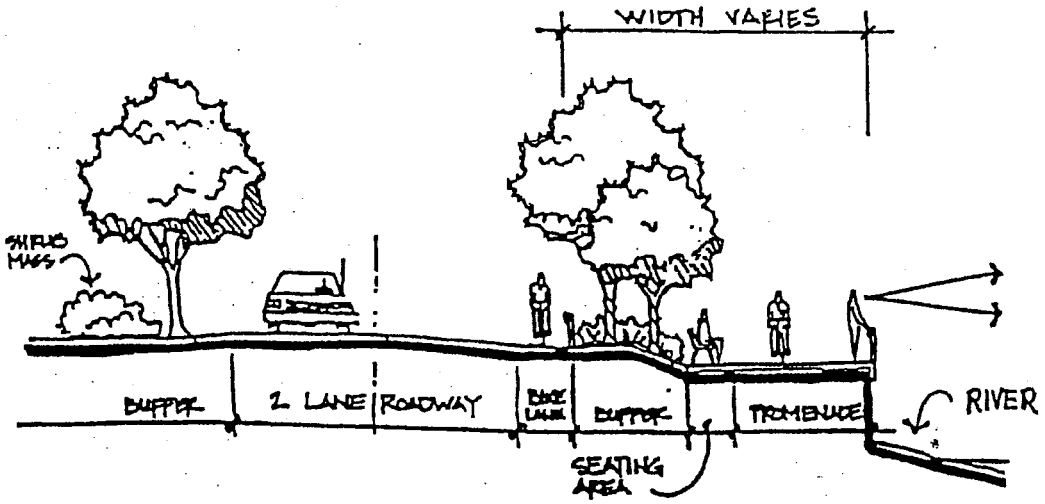


FIGURE 7 EAST RIVER ROAD STREETSCAPE
(Illustrative Sketch Section)

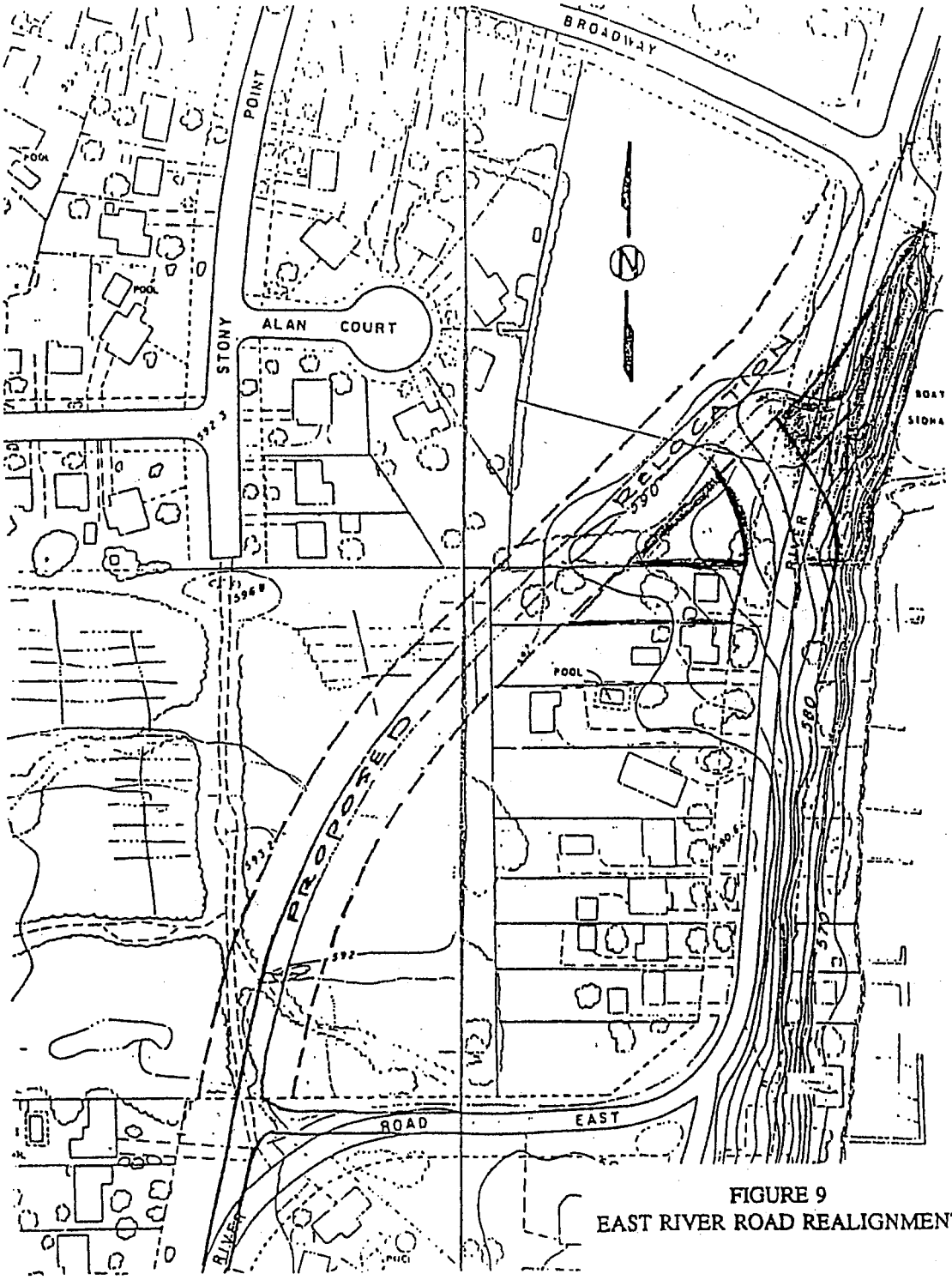


FIGURE 9
EAST RIVER ROAD REALIGNMENT

Light Industrial Access - As light industrial uses are developed on the northwest side of the island, there will be corresponding increases in traffic volume, especially during peak hours. Much of this traffic will be directed toward Thruway interchanges and will create congestion on roadways that service those interchanges. To alleviate potential problems on these routes, the plan recommends Alvin Road be extended as an industrial access road from Whitehaven Road to Long Road.

This road will funnel industrial traffic directly to the Thruway interchange at Long Road and Whitehaven Road for easy access to the South Grand Island Bridge interchange. In combination with the construction of a new interchange at Bedell Road, they will also reduce the need to use the predominantly residential portions of Alt, Staley and Alvin.

Parkways - Existing Parkways on Grand Island should be preserved and enhanced as follows:

- Landscaping along the West River Parkway should be enhanced in accordance with a landscape plan that also includes the development of a pedestrian/bikeway, similar to **Figure 8, West River Road Streetscape**. Opportunities to extend these linear recreation features into the interior of the island via the planned greenways should be incorporated into the landscape plan. Further, year round recreation opportunities should be encouraged along this corridor by providing year round parkway maintenance.
- Landscape treatments along Beaver Island Parkway should be enhanced to screen adjacent land uses with evergreen vegetative screening.

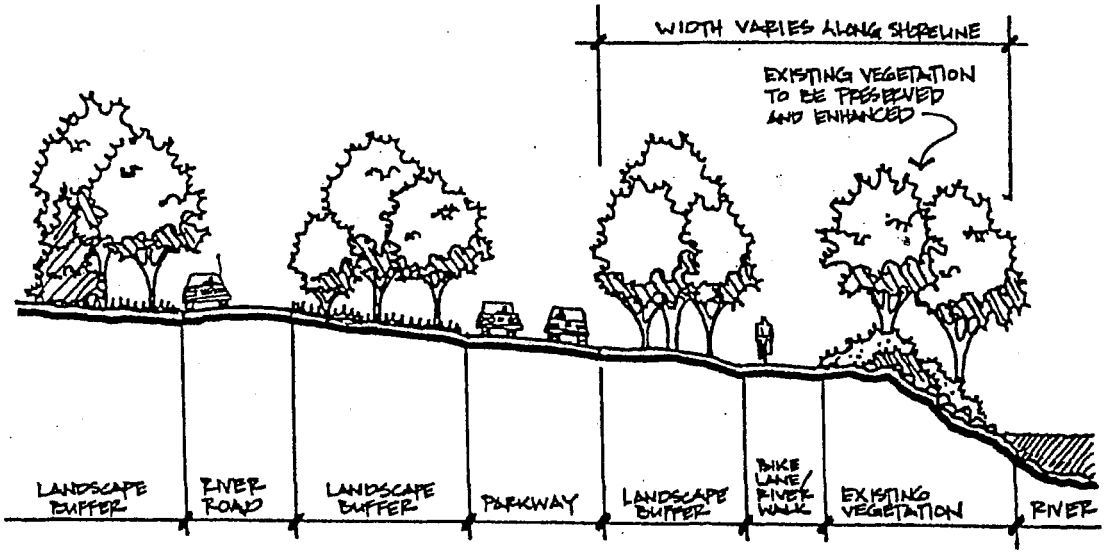


FIGURE 8 WEST RIVER ROAD STREETSCAPE
(Illustrative Sketch Section)

Conceptual Residential Collectors - The Transportation Plan also shows a number of residential collectors. They are based on the extension of approved subdivision street and are intended to guide the Town's planners in reviewing future subdivision plats. These conceptual alignments are designed to minimize intrusions into significant open space resources while providing transportation links between adjacent developments. They provide access alternatives for emergency vehicles and help distribute traffic flows evenly over the existing road network. As

developments are approved, the location of these links should be refined based on more detailed study.

Bikeways - Bikeways can be an important and enjoyable component of the town circulation network. Existing stream corridors and utility right-of-ways provide excellent opportunities to develop bikeways in the town. In general terms, a bikeway is any facility exclusively or semi-exclusively reserved for bicycles. The U.S. Department of Housing and Urban Development (1975) provides a classification system for bikeways. They include:

- Class I - The right-of-way is reserved exclusively for bicycles and is completely separated from roads and other paths/trails. Limited cross flow of vehicles and pedestrians is permitted.
- Class II - The right-of-way is reserved exclusively or semi-exclusively for bicycles, but is not completely separated. Through traffic for vehicles or pedestrians is not permitted. Limited cross flow of vehicles and pedestrians is permitted.
- Class III - This is a shared right-of-way where bike lanes are designated by signs or stencils.

Examples of the three classes are provided in **Figure 10, Bikeway Classifications.** A system of bikeways is recommended in the Recreation Plan prepared by Kotz and Associates.

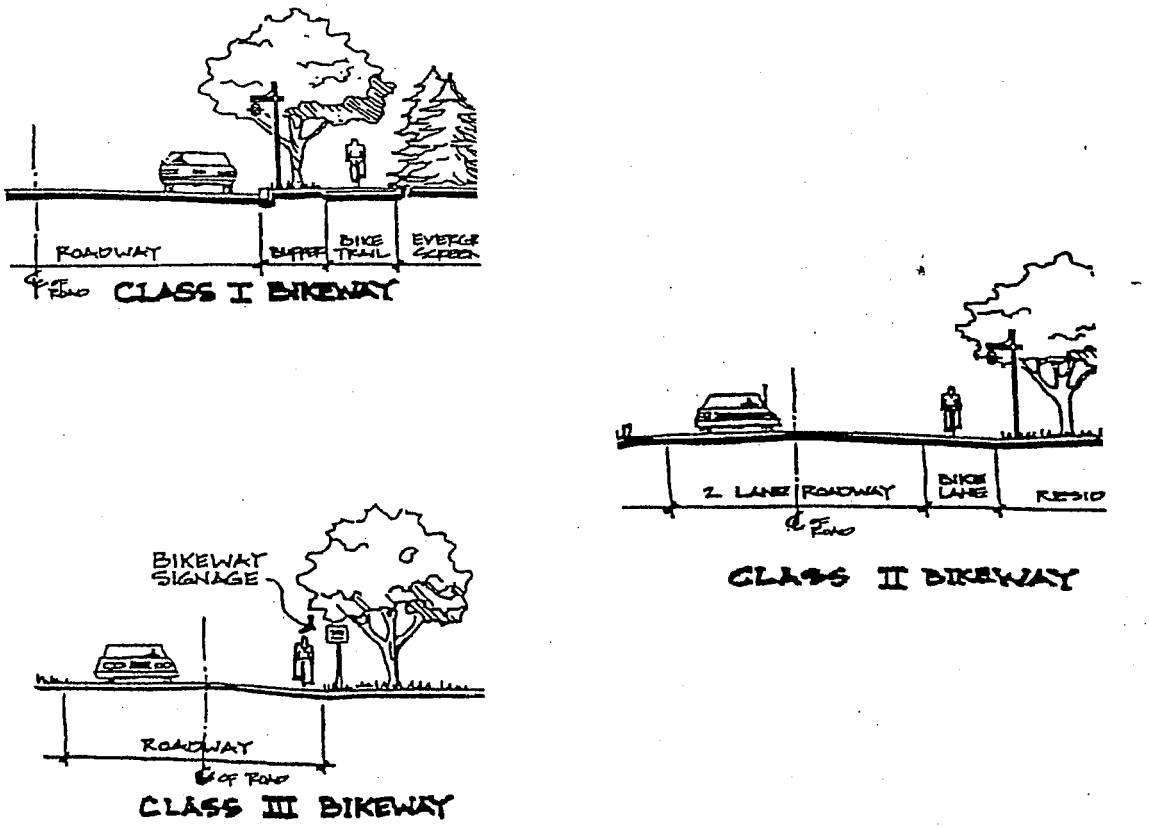


FIGURE 10 BIKEWAY CLASSIFICATIONS
(Illustrative Sketch Section)

Highway Planning Guidelines- The Inventory and Analysis provides insight into the need for development of detailed site planning guidelines dealing with land uses that abut major elements of Grand Island's highway network. The plan recommends that these guidelines be developed as part of the plan's implementation package and that they include:

- Unrestricted curb cuts be eliminated throughout the town and a policy of providing channelized access to all land uses adopted.
- Landscaped planter strips be established within the front yard required setback along all major roadways providing access to non-residential zones. These planters should be sized in accordance with the land use goals established by the plan for each area.
- Where feasible, linkages between the parking lots or internal accessways of adjacent land uses be established as a condition of site plan approval for all non-residential uses and in multi-family residential areas.
- For land uses deriving access from Grand Island Boulevard, a system of marginal access roads be designed as a preferred alternate to the linking of parking lots and accessways.
- Direct access to roadways designated in the Transportation Plan as major thoroughfares or collectors from individual residential parcels be discouraged and that such access be encouraged on the system of through residential streets shown in the plan.

Interior Intersections- the plan identifies a number of interior intersections that will benefit from realignment or channelization. All are identified on the Transportation Plan.

Community Facilities

The Comprehensive Plan identifies land use areas and provides descriptions of desired characteristics of each of these areas in order to give the community's goals and objectives spatial location. This descriptive process allows community planners to then develop specific actions required to implement the plan and attain the goals. The planner's task, however, also includes the development of action programs to provide for the community facilities needed to support the land uses recommended as part of the plan. This section addresses these community facilities.

The present fiscal situation for local government in New York State can best be characterized as being without necessary resources to provide facilities and infrastructure to manage community growth. This picture may well continue for the foreseeable future and demands a conservative approach to facilities planning. That approach in Grand Island should be characterized by:

- Maximum utilization of existing facilities.
- Incremental growth at a rate commensurate with the creation of need.
- The provision of new facilities by the private sector as part of the development approval package.
- Designed and developed with low capital and low maintenance cost solutions.
- The grouping of facilities to maximize use of support facilities such as parking, utilities and security services.
- Multiple use of sites and structures such as the use of school site recreational facilities to support local recreation programs.

These concepts are inherent in the planning for the following facilities.

Fire Safety Services

At present the Town's volunteer fire company operates out of three stations; one immediately adjacent to the Town Hall on Grand Island Boulevard, another on Stony Point Road near the intersection of Huth Road, and a third at the intersection of Fix and Baseline Roads. During the inventory and analysis phase of the study, no operational difficulties were defined under the present system.

Accepted planning design criteria indicate that fire stations should be located:

- Near extensive commercial and industrial areas or where high life loss hazard areas exist (population concentrations). These hazard areas would include higher density residential areas.
- With 1.5 to 2.0 mile service radius in area requiring less than 4500 gallons per minute of fire flow (water).
- Where physical barriers do not impede access to potential fire hazard areas.
- In close proximity to the intersection of major roadways that facilitate access to their service area and provide for quicker response times.

Although the fire company is currently evaluating needs and locations for two new fire stations on both the east and west sides of the island, the plan recommends the following sites be considered:

- At the intersection of Whitehaven Road and the proposed loop road, to provide coverage for the extreme eastern side of the island and development sites deriving access from the eastern-most ends of Ransom and Whitehaven Roads, as well as a significant segment of East River Road. This location would have better north-south access with the completion of the loop road and enable the new station to provide "mutual aid" to Fire Station #2.
- At the intersection of Bedell Road and the Proposed Industrial Access Road, to provide coverage for the northwest corner of the town where intensive industrial uses are being planned. This station should be considered for special training and equipment required for dealing with industrial accidents and fires. These services would be a positive component of the Town's Economic Development Plan.
- Near the intersection of Staley Road and George Alt Boulevard, to provide coverage for the extreme western portion of the Town in development areas served by the western ends of Staley, Love and Fix Roads. The concept of multiple use support facilities would dictate that this site be in close proximity to the Little League Baseball Park and the 30 acre site reserved for school use, located on the south side of the road.

Water Supply

Wendel Engineers completed a study of the Town-wide water system that was completed in November of 1988. That study indicated that the Town's existing water plant would produce over 561 million gallons of water in 1989 and that an additional 244 million gallons would be purchased from the Niagara County Water District. On a daily basis, this consumption approximated 2.16 million gallons per day, an amount sufficient to support the development of the community for the foreseeable future.

The report did, however, recommend:

- The improvement of the raw water intake to increase its capacity to 3 million gallons per day, with a 5 million gallon per day peak flow.

- The pump station be fitted with 3 pumps, any two of which can handle the 5 million gallon per day peak flow.
- Future peak flows be handled by drawing on the existing 4 million gallon storage facility.

Sewer Service

Roughly half of the town is served by central sewers. Service areas are concentrated north and east of the Thruway, although much of the residential development centered on Beaver Island Parkway is within one of the six individual service districts. One Sewerage Treatment Plant located at the north end of Baseline Road, immediately adjacent to Buckhorn State Park, serves all of these districts. The plant is currently operating at approximately fifty percent capacity. The remaining capacity, 1.7 million gallons per day, is sufficient to support an additional 15,600 residents or 5,800 dwelling units assuming 0.2 MGD residual capacity is allocated to non-residential uses. Under the proposed comprehensive plan, both the density and land area devoted to multi-family residential uses in the Grand Island Boulevard corridor have been reduced. That reduction should ensure adequate sewage treatment capacity under the plan.

Excess sewage treatment plant capacity should be directed toward avoiding the contamination of the East Branch of the Niagara River. This strategy would require that existing dwellings and any new development in the Low Density Residential area along East River Road be given first priority in the allocation of capacity.

Krehbiel Associates, Consulting Engineers, studied the system in 1990 and determined that water infiltration was a significant problem, particularly during periods of wet weather, and that current capacities were sufficient to accommodate current growth projections. The report recommends:

- House to house inspections be conducted to identify sources of wet weather infiltration. The implications are that the source of the infiltration is the cross-connection of sump pumps with sanitary sewers.
- The town's sewer ordinance be amended to require the disconnection of cross-connections between sump pumps and sanitary sewers.
- House plumbing inspections be required at the time of property transfer.
- All dwellings be required to have sump pumps that discharge to an approved storm water drainage structure. As with some communities in Erie County, this requirement could be implemented at the time of property transfer. An alternative would be to establish a reasonable time period within which pumps must be installed.
- The creation of a "Master" Sewer District consolidating the present six smaller districts. This consolidation would simplify the administration of the districts, provide a uniform tax structure, and provide for the uniform distribution of any future capital costs.
- Revision of the current tax and fee structure to provide funding for a retention facility. This facility would provide an interim solution to the infiltration problem by providing a storage facility for excess sewer flows during wet weather. This facility would act as a metering structure to prevent sewer flows that are in excess of the plant's capacity from by-passing the plant during these periods. The facility would be located immediately south of the Sewerage Treatment Plant and would require the acquisition of parkland from the State of New York.

Police Services

The current population of the town is slightly over 17,560 people. It is served by the Erie County Sheriff's Department, the New York State Police and a part-time Town of Grand Island Police Force. As population increases, pressure will increase to create a full-time force with adequate physical facilities. This will include a fully staffed headquarters with holding facilities and vehicle storage/maintenance space. Experience has shown that this begins to occur when population is in the 20,000 to 25,000 range, and often results in space being provided in the Town Hall for these activities. As the department matures and grows, separate facilities become the order of the day. Their location should support the town center concept and provide for easy access to an intersection of major east-west and north-south roads.

Schools

The Grand Island School District currently operates three elementary schools (Sidway, Huth and Kaegebein) and a Junior-Senior High School Complex on Ransom Road. In addition, the district owns several undeveloped sites including:

- Ransom Road Site-27 Acres on the north side of Ransom Road just west of its intersection with East River Road.
- Bedell Road Site-45 Acres in the southwest quadrant of the intersection of Bedell Road and the Thruway.
- Whitehaven Road Site-37 Acres on the south side of Whitehaven Road near the intersection of the proposed extension of George Alt Boulevard.
- Staley Road Site-30 Acres on the south side of Staley Road west of George Alt Boulevard.
- Love Road Site-31 Acres on the north side of Love Road just west of Baseline Road.

The public school system is augmented by St. Stephens, a private religious school offering instruction in grades K through 8.

The sites that are currently available for school development in the long term are well sited in relationship to the existing and proposed transportation system. The Bedell Road site is, however located in close proximity to the proposed industrial access road in an area designated for light industrial development. This location is a prime industrial area that should be reserved for those uses. Its development as a public school would create conflicts that would be detrimental to the site's use.

The most intensive land uses will occur in the northeastern portion of the town where adequate utilities are available and the town center will be located. The school district may wish to find an alternate site for an elementary school in the vicinity of Whitehaven Road and the proposed loop road.

Recreation

A recreation study was conducted independent of the Comprehensive Plan to focus in on the current resources and the existing and future needs. This study, however, was coordinated with the Comprehensive Plan process and is an integral part of the Plan. The "Parks, Recreation, and Open Space Plan" (hereinafter referred to as the Recreation Plan) for the town was prepared by Kotz and Associates. The plan is a part of this comprehensive plan document by reference (Kotz and Associates 1992). This section of the Master Plan provides an overview of the Recreation Plan, focusing on the recommendation for the continued provision of parks, recreation, and open space in the town.

The Town of Grand Island recognizes the definition of open space as any parcel or area of land or water essentially unimproved and permanently set aside, dedicated, designated or reserved for public or private use or enjoyment.

Goals and Objectives

The recreation and open space goals for the Town of Grand Island are to "improve and expand recreation lands and facilities in the town that are readily available to all residents", and to "preserve and enhance permanent open space that protects significant scenic and environmentally important areas" (Kotz and Associates 1992). The following objectives were established to meet these goals:

- Encourage the development of diverse recreational facilities including parks, playing fields, playgrounds, water related activities, a recreation center, and other facilities that meet the recreation needs of all members of the community.
- Expand the bikeway trail system to provide opportunities for linking various parks, playing fields, playgrounds, schools, residential areas, and other recreational and community destinations. Utilize watershed and floodplain corridors, and emphasize scenic vistas wherever possible.
- Make appropriate use of innovative land use controls such as cluster development, transfer of development rights, coordination of parkland reserves in multiple developments, parkland dedication or collection of a recreation fee, and easement arrangements with future development as a way to increase open space and recreation opportunities, develop greenways, and to preserve the scenic character of the island.
- Encourage the location of new recreational facilities in areas where they will contribute to the preservation of open space, unique natural resources, historic sites, and scenic views and vistas - especially to the Niagara River.
- Include the Town of Grand Island Parks and Recreation Department in all review phases of development projects in order to coordinate adequate provision of parks and recreation lands and open spaces.

Current Inventory and Recommended Recreation and Open Space Standards

The Recreation Plan breaks the town's recreation resources into several components. These include town facilities (developed parks), undeveloped town open space, public school facilities, and New York State Parks (regional parks).

The town facilities include: Nike Base Park (20.76 acres), Veterans Park (122.88 acres), Havenwood Estates (9.1 acres), River Meadows (1.5 acres), Ransom Village (11.1 acres), Fernwood (3.23 acres), Ed Ball Park (1.6 acres), Island Estates (4.34 acres), linear park (10+ acres), and Tower Park (1.0 acre). Undeveloped town-owned open space totals 139.90 acres. There are 207 acres of public school facilities. The New York State parks include Buckhorn Island State Park (896 acres) and Beaver Island State Park (951.8 acres).

Grand Island parks are also categorized based on type and service area. Neighborhood parks are small parks that service a small area. These parks are generally within walking distance of residences. Community parks serve the entire town and are generally much larger than neighborhood parks. Regional parks serve the town and surrounding communities. Their large size and/or unique characteristics attract people from outside the community, as well as within. Linear parks are generally trails, bikeways, pedestrianways or other open space corridors. Open space is often a term used to include areas such as parks, fields, woods and other natural areas.

Based on the inventory of recreation facilities and open space and on the current population, Kotz and Associates were able to determine the availability of recreation facilities in terms of population. This can then be compared with recommended standards. Currently, 2.38 acres per 1000 population (2.38 ac./1000 pop.) of neighborhood parks is available. The average size of these parks is 5.2 acres. Based on state and national standards and the needs of the community, Kotz and Associates recommend 2.5 ac./1000 pop. with a minimum park size of 5 acres. There are 8.2 ac. of community parks per 1000 pop. They include the Nike Base Park and Veterans Park. The recommended standard is 8 ac./1000 pop. and a minimum size of 25 acres. Few towns are blessed with a regional park, Grand Island has two, Buckhorn Island State Park and Beaver Island State Park. This is more than sufficient for the town. There are no real standards for linear parks. However, it is recommended that the town acquire land from future developments, as the opportunity presents itself, to develop linear park systems linking town facilities. Open space is currently available at 8 ac./1000 pop. It is recommended to have a minimum of 10 ac./1000 pop.

When comparing existing park land and open space to the recommended standards, there is a small deficiency in available land for neighborhood parks, open space and active recreational facilities (ball parks, football fields, etc.). All recreation categories become deficient (except regional parks) for the design year 2002.

Recreation Plan Recommendations

In order to address the recreation and open space deficiencies in the town and meet the town's goals and objectives for recreation and open space, the Recreation Plan makes the following recommendations:

- Neighborhood Parks - Park land should be obtained by the town in obviously deficient areas as the opportunity presents itself. The best method currently in place is through the site plan approval process. Potential park locations should be considered at Ferry Village, River Oaks, and Scenic Woods.
- Community Parks - An additional 34 acres of community park land is recommended by 2002. This should be located on one site, centrally located for convenience. The parcel of undeveloped land at the intersection of Love Road and Alt Boulevard is recommended for this park.
- Linear Parks - Bikeways, trails and pedestrianways should link town facilities to allow easy access.
- Town Center Plaza - The area adjacent to the town hall on Whitehaven Road should be developed into a park/recreation area.
- Active Recreation - Additional soccer fields, football fields, softball fields, little league fields, tennis courts, basketball courts, and a gymnasium and indoor swimming pool are all need within the town. Most of these deficiencies can be accommodated by developing Veterans Park and building a recreation center.
- Children's Play Areas - Playground type activities can be incorporated into Veterans Park and the proposed neighborhood parks.
- Bicycle Trails - Designated trails separated from roadways (Class I) should be developed wherever possible in linear parks and adjacent to the proposed Loop Road. Bike lanes along existing roadways (Class II) should be established.
- Passive Recreation - Passive recreation space is divided into 4 categories in the Recreation Plan. They include: publicly owned land and dedicated to recreation, publicly owned land but not developed for recreation (eg., maintenance facilities, library), semi-public land (eg., schools, fire department, churches), and privately owned land. Whether publicly or privately

owned, wetlands, floodplain areas, stream corridors and coastal boundaries will likely remain open space. The Recreation Plan recommends that the town acquire land through future developments, require open space from commercial and industrial development, establish conservation and/or recreation easements, develop a transfer of development rights program, or develop a land trust to preserve open space but keep the land in private ownership.

Greater detail on the recreation inventory for the town, its current and potential needs, and recommended standards and options for meeting the town's recreation goals and objectives is available in the **TOWN OF GRAND ISLAND PARKS, RECREATION, AND OPEN SPACE PLAN** (Kotz and Associates 1992).

Ferry Village Master Plan

Components of the Plan

The Ferry Village Master Plan is composed of eight discrete sections, each dealing with a specific aspect of the plan. All are related to the goals and objectives defined early in the planning process, the land use plan which introduced the general concept for the plan, and the specific water access recommendations. Land use descriptions have been expanded in a series of illustrative site development plans and cross sections. These in turn are translated into recommendations for development guidelines and standards. Specific guidance is also provided for changes in circulation and the Village's relationship to the surrounding Beaver Island State Park.

Land and Water Use Plan

The Land and Water Use Plan (Figure 11) for Ferry Village evolved from public discussions of the alternatives presented in a generic environmental impact statement. The plan is conservative in that it focuses on preserving the current residential land use pattern while providing for modest expansion of both residential and water-related uses. Recommendations provided for managing growth on vacant parcels by retaining densities currently available in the Town Zoning Code and adding standards and guidelines which ensure compatibility of new development with the Village's existing character. The plan features three residential types which form transitional uses between water-oriented uses immediately adjacent to the Niagara River and State park land generally west of East River Road and Elmwood Road. Along the Niagara River, north of Ferry Road, the plan calls for establishing the Village's only new commercial area and the redevelopment or expansion of water-oriented activities at the existing commercial and private boating facilities. South of Ferry Road, the plan provides a number of recommendations for the maintenance of the existing mixed use area which encompasses Blue Water Marina and the Niagara River Fishing Station, along with some residential uses. Specific capacity and design provisions for the East River Marina, a significant water access opportunity for the village, are absent from the plan. Broad plan concepts relating to the functional relationship between the village and the State Park have been included as non-binding recommendations. The extent, design capacity, access pattern, activities, and form of the marina will be determined by a future marina improvement planning process to be undertaken by the NYS Office of Parks, Recreation, and Historic Preservation.

The Ferry Village Master Plan generally conserves the existing residential character of the village while providing for the development and redevelopment of key parcels in uses and at densities that are consistent with the existing neighborhood. The land use, density, and site development recommendations presented in the plan are designed to preserve and maintain compatibility, with the character of the area.

Residential - The Ferry Village Master Plan is dominated by two residential areas that are north and south of Ferry Road. A third accommodates the existing single-family detached residential units along the west side of East River Road and in the southwest quadrant of the intersection of Ferry and Elmwood Roads.

Vacant portions of the Buffalo Launch Club and Anchor Marine parcels north of Ferry Road are recommended for single-family residential uses at a density of 3.5 dwelling units per acre. An illustrative site development plan for each of these sub-parcels is shown in Figures 12 and 13. This concept calls for integrated development of the parcels around a central canal feature which provides water access and value to the residential units. The circulation pattern also will be coordinated (although that coordination is not shown on the two site development sketches) to provide a unified system that provides alternative emergency access to uses along lower East River Road, in the event that the intersection of Ferry and East River Road is blocked. Residential structures will be at a scale compatible with the residential units on the west side of Ferry Road and consistent with the size and scale of other market rate housing being developed on Grand Island. Design criteria presented in this plan further define the character of this land use. Specific design elements that should be implemented during the site plan review stage of the planning process should include the addition of street trees along Ferry and East River Road, and orientation of driveways and garages so as to reduce the visual impact of a series of garage doors facing the roadway. Additionally, site development planning for redeveloping Anchor Marine should be sensitive to the quality residential atmosphere being created to the west. It should reflect the need to locate compatible uses in close proximity and provide adequate landscaping/buffering.

The residential area south of Ferry Road is currently in single-family detached residential use with the exception of scattered commercial use along the south side of Ferry Road. Residences generally do not conform to current zoning requirements. The plan calls for preservation of this residential area by providing improvement to its road and surface water drainage systems, and establishing a Hamlet Residential Zone which will enable the maintenance and replacement of residential structures in accordance with the existing pattern. Infrastructure improvements targeted for this area include repaving Elmwood, Orchard, and Cox Roads and Allentown Place. Drainage improvements initiated by the Town of Grand Island Engineering Department are recommended for completion, along with specific projects to reduce the probability of flooding. Selective replacement of street trees rounds out the program for this land use area.

Non-Residential - Non-residential and mixed use will continue to dominate the shoreline of the Niagara River, albeit with some significant physical improvements. From north to south the following elements are included in the plan:

Buffalo Launch Club - The area generally east of the recreation complex (tennis courts and swimming pool) will remain the center of boating activity for the Club and will be expanded to provide additional boat docking facilities. The expansion will be accommodated in two areas; expansion of the slips directly in the Niagara River and providing additional slips along the parcel's common southern boundary with Anchor Marine. Conceptual plans for additional slips in the river have been developed and call for extending the existing pier system to the east and north. The expansion will increase the Club's capacity by an additional 40 spaces. The more ambitious project to expand boat slips along the parcel's southern boundary will necessitate the construction of a canal in cooperation with Anchor Marine. This facility would provide as many as 100 spaces for the club and would provide the water access necessary to undertake the housing recommended for the western half of the site.

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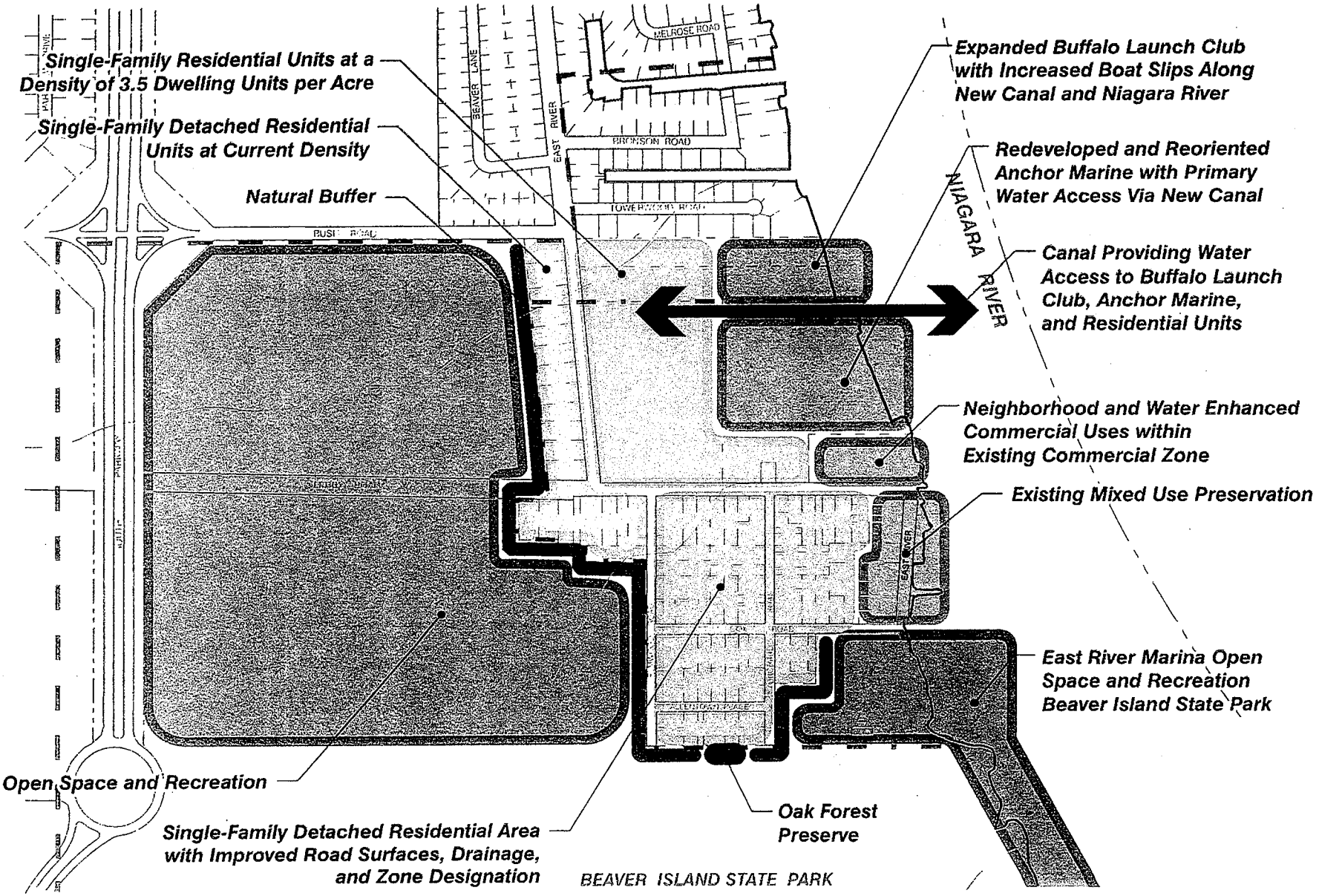

FERRY VILLAGE MASTER PLAN
GRAND ISLAND, NEW YORK

A Joint Project of the Town of Grand Island
NYS Office of Parks Recreation and Historic Preservation, and the Empire State Development Corporation
- URS Consultants, Inc. in association with
- Environmental Design & Research
- Fat Albert Associates,
- TVGA and
- Economics Research Associates

LAND AND WATER USE PLAN
FIGURE 11

300 0 300
SCALE IN FEET

Anchor Marine - The area currently utilized for boat and recreational vehicle sales, service, and storage is proposed to remain in that use with substantial changes to internal site utilization. The changes are necessitated by the construction of a canal along the northern boundary of the site. This water feature will provide water access for the redevelopment of the marina, as well as access for the residential complex at the western ends of this parcel and the Buffalo Launch Club parcel. It also will create an opportunity for the Launch Club to expand docking facilities and, indirectly, their membership. Canal development would necessitate the demolition of three structures on the site and one additional on the Launch Club parcel. The sales and service functions in these buildings would be relocated to the south in an area adjacent to the proposed commercial area. Three fuel tanks also would be removed and replaced. Service facilities would be expanded.

Overall capacity of the marina would be increased from 110 to approximately 230 slips with the majority being in the reconfigured marina where they are not subject to the wave action of the Niagara River created by extensive recreational boating.

Neighborhood and Water-Enhanced Commercial - The north side of Ferry Road east of the Anchor Marine driveway is proposed for neighborhood retail and service and water-enhanced use. The economic viability of the use will be enhanced by the intensification of boating activity at the two facilities to the north, and residential units developed at the western end of the Anchor Marine and Buffalo Launch Club properties. Although no specific plan for the redevelopment of East River Marina has been formulated, the reestablishment of that facility can only help to promote the retail and service use that will be available in this center.

Typical uses that would be accommodated in the district would include retail and personal service establishments, restaurants and cafes, and dry goods stores. Each of these uses should be oriented to meeting not only the needs of residents, but also the needs of the boating community. A restaurant with visual access to the Niagara River and boating access via any of the four existing and proposed boating facilities would be an appropriate use for the eastern end of the site.

The site is approximately 3 acres and could accommodate approximately 45,000 square feet of commercial space. These estimates are based on 30 percent lot coverage and 5.5 parking space per 1,000 square feet of gross leasable space. Provisions for a bike-pedestrianway along the parcel frontage and landscape provisions designed to ensure compatibility of retail development with the character of the village could reduce this estimate.

Lower East River Road Mixed Use District - Parcels fronting on both sides of Lower East River Road are to be included in one land use category because they share many of the land use attributes as the developed residential neighborhood to the west. Uses are mixed water-dependent retail, housing, and membership club (Niagara River Fishing Station). Although these uses could form the nucleus of a revitalized water-enhanced commercial district, the plan recommends preservation of the existing land use pattern with few infrastructure improvements.

Neighborhood Scale Recreation-Water - oriented recreation along the Ferry Village shoreline is limited to commercial and private access from the Buffalo Launch Club to Cox Road. South of Cox Road the plan provides for the redevelopment and enhancement of a neighborhood- scale recreation area. Although this parcel is part of the former Offerman Estate that was incorporated into Beaver Island State Park, it is strategically located with respect to Ferry Village, and has provided neighborhood-scale recreation for residents of Grand Island. Any recommendations for

its use are strictly advisory and the parcel' s eventual use will be determined by a future planning process to be undertaken by NYSOPRHP.

Ferry Village Architectural and Urban Design Guidelines

Land use recommendations provide a picture of the density and geographic extent of uses recommended for Ferry Village. However, the village is defined not only in terms of land use, but also in terms of the qualitative aspects of those uses. These qualitative aspects can be quantified and applied to new development or redevelopment projects in the form of guidelines that can be used in the project design process and by local growth management agencies. Guidelines must be applied with reason particularly as they relate to commercial structures associated with marine facilities where massive structures may be needed to accommodate the storage, sales, or repair of large boats. The following guidelines apply to all development and redevelopment in the village unless specifically provided for individual areas.

- To preserve the current residential atmosphere, new buildings and reconstructions should be compatible in size, scale, and mass with existing structures. Special consideration needs to be given to marina structures for indoor storage, sales, and repair of boats. Notwithstanding their size and scale, building mass should be reduced by varying roof lines and the addition of wings which can modify the appearance of excessive size.
- To preserve the grain of development within Ferry Village, the rhythm of buildings and building facades should be maintained. Long continuous facades and elevations should be avoided. Structures that require large interior volumes should be designed to minimize lengthy unbroken facades and roof lines.
- Building height for residential structures north of Ferry Road should be restricted to 30 feet exclusive of chimneys and antennae. Within existing residential areas south of Ferry Road, building height should be limited to 20 feet to conform with the average height of existing structures. Non-residential structures requiring interior work should require the issuance of a Special Use Permit which specifies the techniques that will be employed to ensure maximum compatibility with surrounding residential uses.
- Front yards setback from the road (pavement edge) providing primary access should be 40 feet with the exception that no new structures shall be constructed closer than 70 feet from the pavement edge of Ferry Road and East River Road north of its intersection with Ferry Road.
- South of Ferry Road side, yard setbacks should be 10 feet for residential structures. Accessory buildings may be erected within 1 foot of the lot line provided that no accessory buildings shall be within 20 feet of a residential structure.
- North of Ferry Road, residential structures or groups of attached residential units may not be less that 30 feet distant. Accessory structures must be set back from residential unit at a distance equal to the median height of the structure.
- Rear setbacks for residential structures in all areas shall be a minimum of 40 feet.
- Parking requirements will be established in accordance with ITE (Institute of Transportation Engineering) parking generation rates and shall be located behind building setback lines where possible.
- Roof lines should vary and favor gabled and hip roof styles with moderate pitches compatible with the surroundings.
- Windows should be symmetrical and proportioned to wall space. Types and materials should be compatible with the historic and architectural character of Ferry Village.
- Stylistic trim using cornices, scroll work, and similar historically appropriate effects will be encouraged.

- Exterior materials should emphasize a natural appearance with preferences given to wood, wood siding, and brick. For durability and ease of maintenance, and updating existing structures, vinyl siding that simulates wood surfaces may be utilized.
- Colors should be subdued and compatible with the village atmosphere and/or be typical of the period of the architecture of the structure, or the structure from which contemporary designs have been derived.
- Mechanical equipment and systems shall be placed where they will be visually unobtrusive whether mounted on a structure or placed on-grade. Required rooftop installations will be screened from view by architectural elements that are in keeping with the overall design of the structure and the character of the village.
- Refuse disposal containers (dumpsters) should be located at the rear or side of the primary use of a site and must be screened from view by all-season enclosures that are visually compatible with the primary structure and the overall character of the village.
- Community trash receptacles, benches, light standards and other "street furniture" should be of materials and the design that is compatible with the village atmosphere and integrated into an overall design concept for the site.

These design guidelines are not regulations although some may be integrated into the future growth management regulations. They are intended to provide guidance and are not substitutes for creative design solutions.

Illustrative Plans

Several key sites have been identified in the inventory and analysis phase of the master planning process. Their designation as key sites hinged primarily on their visibility, ability to accommodate additional development, and public opinion. The land use categories and design guidelines outlined in previous sections have been applied to conceptual designs for two of these key sites. They appear as Figures 12 and 13. Figure 13 illustrates an appropriate development scenario for the undeveloped portions of the Buffalo Launch Club, while Figure 12 illustrates the undeveloped portion of the Anchor Marine parcel immediately to the south. The Launch Club development is shown as a dependent development requiring access from the Anchor Marine parcel. This development scenario logically would be a second or third phase of a coordinated development project, requiring provisions in the first stage development for roadway extensions. The development of the Anchor Marine project could be undertaken as an independent project or as the first stage of a coordinated development project.

Both of these residential scenarios are predicated on the development of a new water feature linking each unit with the Niagara River, and creating opportunities for redevelopment of Anchor Marine and the expansion of boat slips at the Buffalo Launch Club. The coordination of the commercial development proposed for the end of Ferry Road, although not included in these illustrations, is a logical extension of this plan.

Additionally, a cross section illustrating the desired relationship between development, bike and pedestrianways, and access roads provides a pedestrian's eye view of the Class 1 bike and pedestrianway proposed for the north side of Ferry Road (**Figure 14 - Cross-Section - Ferry Road - View West).**

Waterfront Development Recommendations

Although the primary study area has almost $^1/_2$ mile of shoreline along the Niagara River, opportunities for additional waterfront development are limited to the northern third of that shoreline. Limiting or recommending further development is created by the community's desire to maintain the current

waterfront land uses between Ferry and Cox Road and by the need to maintain the maximum amount of flexibility for the use of Beaver Island State Park shoreline. This flexibility is necessary in order to be able to respond to market-driven development or redevelopment initiatives. The Ferry Village Master Plan does, however, suggest two land use proposals that effect park land. One provides for passive access to the Niagara River to the east of the access drive to the East River Marina. This site could accommodate a Class 1 bikeway and pedestrian path and one or more sitting areas connected by narrow walkways. Landscape management and augmentation are part of this scenario.

Significant waterfront development is planned for the area north of Ferry Road. These recommendations have been previously detailed and are summarized below.

- Increased boating opportunities along the Niagara River at the Buffalo Launch Club
- Development of a canal that provides waterfront access to approximately 56 residential units
- Increased boat slip availability at the Buffalo Launch Club and Anchor Marine with access to the proposed canal
- Visual access to the Niagara River at the water-enhanced commercial complex on the north side of Ferry Road

Park/Village Relationships

As originally conceived, the Ferry Village Master Plan was to include conceptual plans for the revitalization of the East River Marina and recommendations for integrating facilities on undeveloped portions of Beaver Island State Park with land use proposals for the village. Over time, these objectives changed in order to provide the maximum amount of flexibility for the State to respond to long term regional and town-wide open space and recreation needs and potential private sector partnerships for development or operation of park facilities. These partnerships and the nature of the facilities which could evolve would be driven by various factors including market forces. Plans which may evolve from following this strategy will require regional and local community involvement along with an environmental review prior to implementation.

Several key recommendations involving portions of Beaver Island State Park continue to be included in the Ferry Village Master Plan as advisory recommendations. These have been discussed in detail in previous sections of the plan and impact statement, and are summarized below.

- Development of a neighborhood-scale recreation area on the south side of Cox Road available to local residents and park users.
- Creation of a community open space area along the Niagara River between Cox Road and East River Marina. Pathways, sitting areas, and landscape enhancement would be developed in this passive area which would provide visual access to the river.
- Establishment of a permanent open space buffer between the park and the residential uses along the western and southern borders of the village. This buffer would also include preservation of an "oak forest" identified by residents as being visually and environmentally significant.
- Construction of a Class 1 bike and pedestrianway through State park land on the north side of Ferry Road from South Parkway to East River Road. This facility would link the existing bikeway along the parkway to the village and recreation opportunities along the river.

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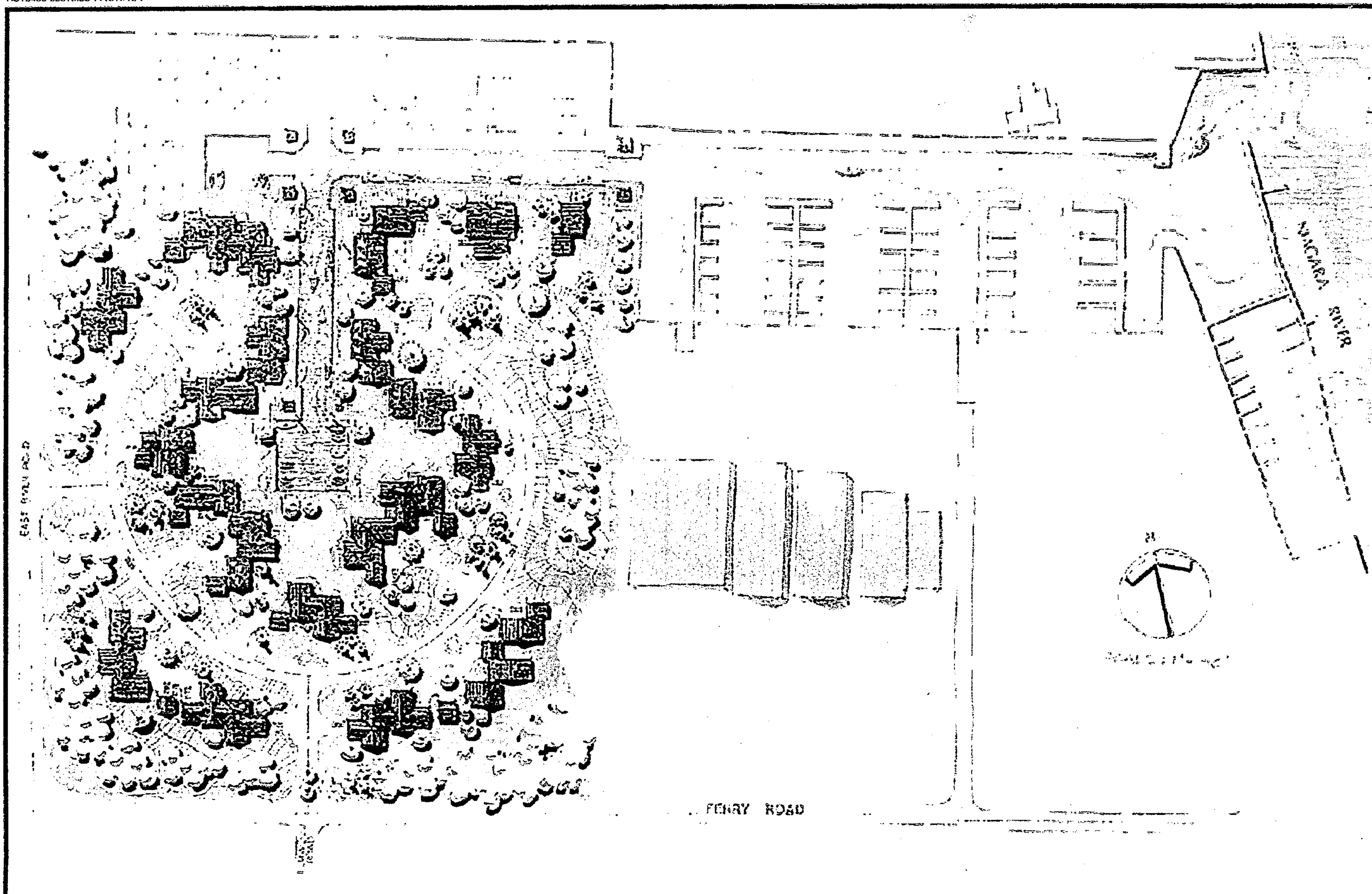

FERRY VILLAGE MASTER PLAN
GRAND ISLAND, NEW YORK

A Joint Project of the Town of Grand Island, NYS Office of Parks Recreation and Historic Preservation, and the Empire State Development Corporation
- URS Consultants, Inc. in association with
- Environmental Design & Research,
- Foit-Albert Associates
- TVGA, and
- Economics Research Associates

ILLUSTRATIVE PLAN
Anchor Marine Housing Concept
FIGURE 12

300 0 300
SCALE IN FEET

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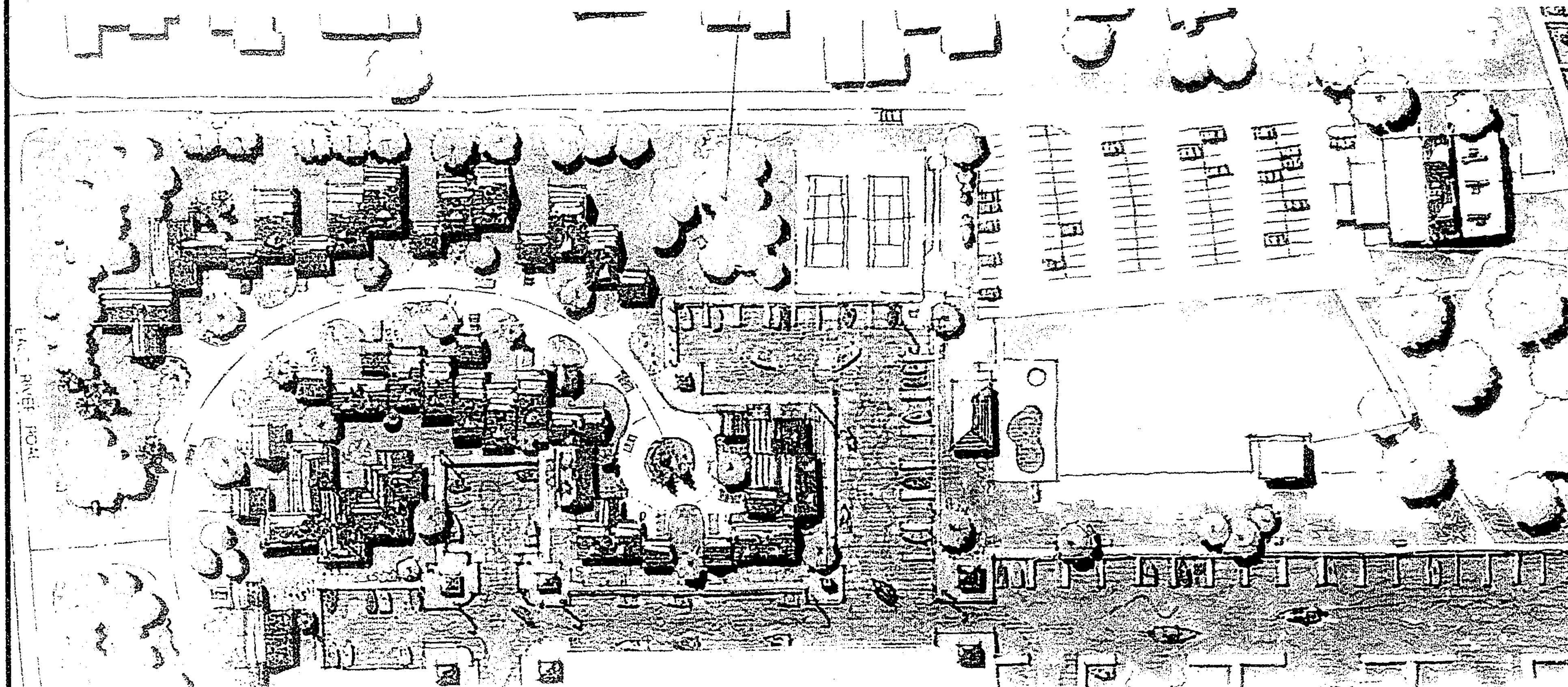

FERRY VILLAGE MASTER PLAN
GRAND ISLAND, NEW YORK

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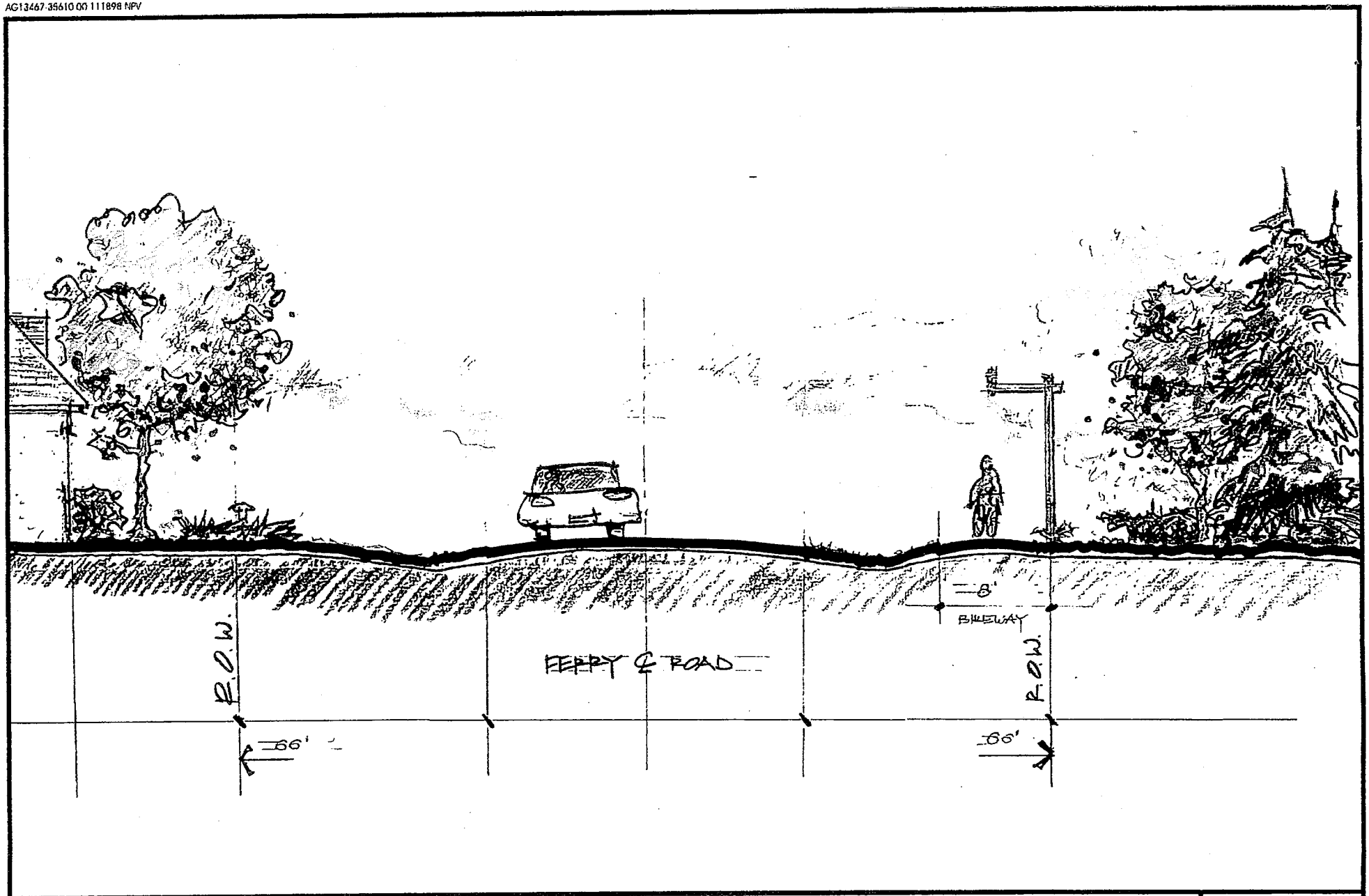
- Fay Albert Associates
- TVGA, and
- Economics Research Associates

ILLUSTRATIVE PLAN
Buffalo Launch Club Housing Concept
FIGURE 13

300 0 300
SCALE IN FEET

AG13467-35610.00 111898 NPV



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CROSS SECTION
Ferry Road - View West
FIGURE 14

200 0 300
SCALE IN FEET

Ferry Village Circulation Plan

The Ferry Village Master Plan outlines a conservative approach to growth and redevelopment in the village. The need for extensive transportation improvements, therefore, is unnecessary and limited primarily to the improvement of existing facilities or the addition of new roadway connections by the private developers as part of the development process. Circulation improvements that will be undertaken include **(Figure 15 Circulation and Waterfront Access Map)**:

Roads:

- Resurfacing residential streets south of Ferry Road as part of a strategy to upgrade the quality of infrastructure in the village's primary neighborhood.
- Providing an emergency by-pass to the Ferry Road-East River Road intersection. This connection will be part of the internal road system designed to serve residents of a new residential area in the northeast corner of the intersection.

Bike and Pedestrian:

- Constructing a Class 1 bike and pedestrianway along the north side of Ferry Road from South Parkway to the river. From the Parkway to an area west of Ferry Road, the facility would be constructed on State land and would require government funding. The path would be designed to Class 3 standards for a short distance in close proximity to the intersection of East River Road in order to avoid conflicts with residential uses to the north. From Ferry Road eastward, the path could be constructed as part of the residential complex proposed for the western end of the Anchor Marine parcel. Similarly, the path could be continued to the Niagara River as development proposals are implemented for commercial uses on the north side of Ferry Road.

Water Access:

- Constructing a canal linking the Niagara River to proposed residential development on the undeveloped portions of the Buffalo Launch Club and Anchor Marine parcels. This waterway will facilitate the redevelopment of Anchor Marine and provide additional boat slips for the Launch Club.

Ferry Village Open Space Plan

Open space dominates the landscape of Ferry Village. Developed and undeveloped portions of Beaver Island State Park frame the village on the west and south. Views of the Niagara River provide a sense of openness along its eastern edge and the greenspace of the western portion of the Buffalo Launch Club property provide definition to the other two sides of the village. The plan reinforces this pattern by proposing establishing a 100-foot natural buffer within the State Park and the creation of a neighborhood-scale recreation area within the park on the south side of Cox Road. This park would extend to the Niagara River and provide for passive enjoyment of the waterfront. Final decisions regarding buffers or development within the park will be the subject of a separate plan currently being developed for East River Marina by NYSOPRHP.

Ferry Village Utility Plan

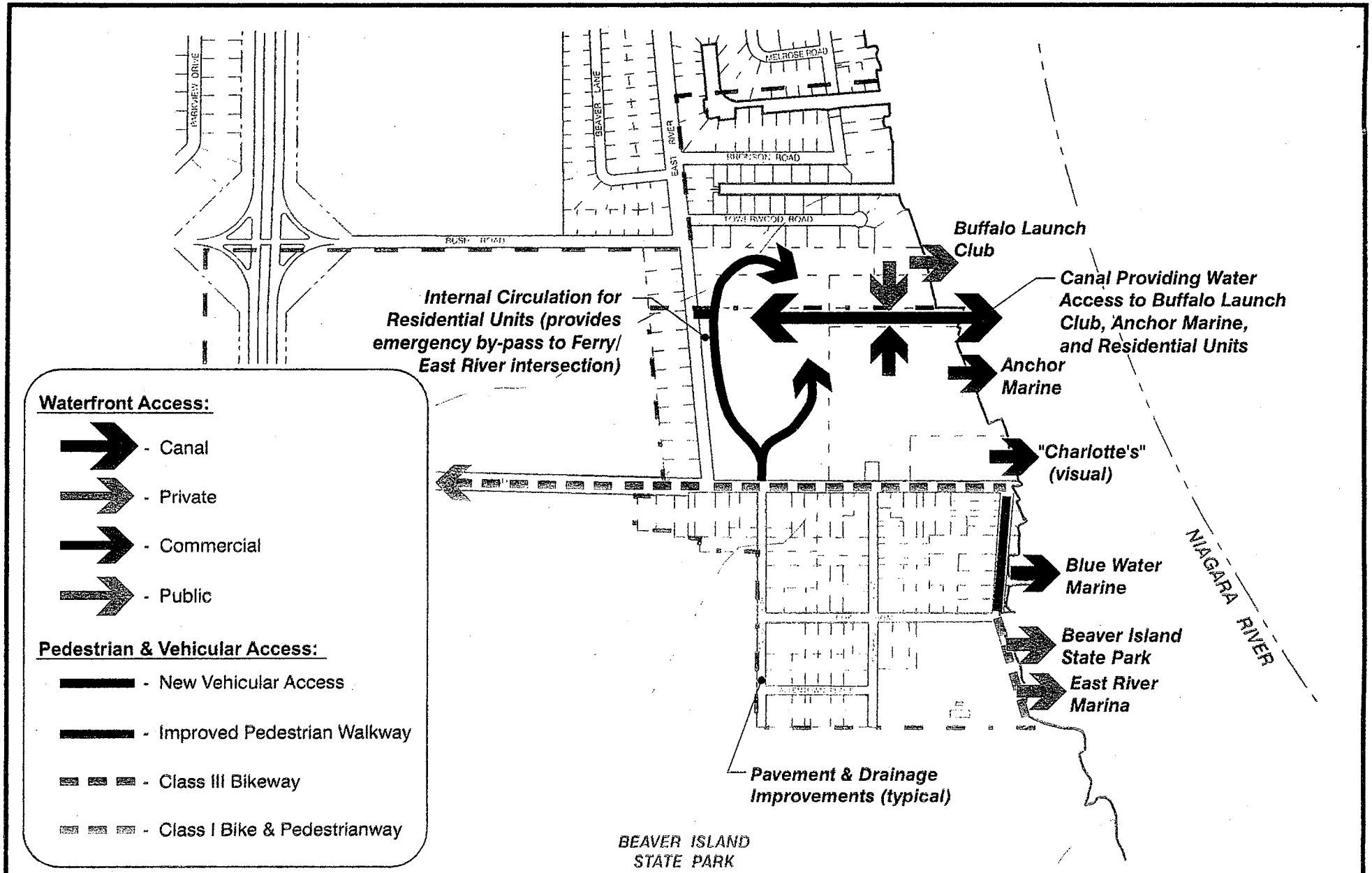
The assessment of public utilities undertaken as part of the inventory phase of the Ferry Village Master Plan indicated no significant capacity problems within the primary study area. The 8-inch water line running from the water treatment plant to East River Road along Ferry Road was installed in 1938 and is in poor condition. In order to guarantee a dependable supply of water to the area, it is recommended that this line be replaced. Costs for replacement are included in the cost/benefit assessment.

Drainage improvements will be required to address periodic flooding that occurs within the 100-year flood hazard zone effecting portions of East River and Elmwood Roads. Costs for the piping required to minimize flooding problems will be reduce substantially with the construction of the canal on the western half of the Anchor Marine property.

Estimated Cost of Public Improvements

Table 3A summarizes the cost in 1997 dollars of public improvement recommend in the plan. These cost have been generated using acceptable industry standards for estimating at the planning level. As the project matures, these cost will be revised to reflect the more accurate level of detail available during the design phases of each project. Cost estimates for replacement of the 8-inch water line along Ferry Road are based on unit cost information provided by the Town of Grand Island and on past experience with similar projects. The estimated cost of improvements is $630,200.

AG11636-35401.00 060997 DJB



FERRY VILLAGE MASTER PLAN

GRAND ISLAND, NEW YORK

A Joint Project of the Town of Grand Island, NYS Office of Parks Recreation and Historic Preservation, and the Empire State Development Corporation
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- Fox Airport Associates
- TVGA, and
- Economics Research Associates

VEHICULAR AND WATERFRONT ACCESS MAP

FIGURE 15

300 0 300

SCALE IN FEET

TABLE 3A
COST FOR PUBLIC IMPROVEMENTS

ITEM	DESCRIPTION	TOTAL COST
Class I Bikeway (Beaver Island Parkway to East River Marina)	Assumes 10-foot wide path, 4,300 feet of new path through light-wooded areas and grass fields (no medium woods to heavy woods). Path is to be constructed to Class I standards and to include signage and path markings. Small sections of path on existing street with 3/4-inch new asphalt topping. A 700-foot section along Lower River Road is excluded.	$229,300
Overlay of Pavement on Local Roads (Cox, Allenton, Orchard, and Elmwood)	Street dimensions - 24 feet x 3650 feet Clean all streets, apply tack coat, 1 inch of new asphalt topping, add signage and pavement markings, adjust manholes, valve boxes, and driveways. Also, mobilization and demobilization and contingency.	$73,300
Construct Playground	Assumes typical playground (swings, slide, etc.).	$80,600
Replace 8" water service line	Replacement of 2,495 feet water line from Water Treatment Plant to East River Road excluding 375 of boring under South Parkway.	$217, 000
Storm Sewer Improvements	Install new storage sewer along west side of Elmwood Road with outfall in new canal on Anchor Marine property.	$30,000
TOTAL COST		**$630,200**

VI. IMPLEMENTATION

The process of updating the comprehensive plan for the Town of Grand Island began with the inventory and analysis of the town's resources, as well as the attitudes and ideas the residents have for the future of their town. From this information, the town developed goals and objectives. Recognizing these goals and objectives, a Comprehensive Plan was developed to provide direction for managing natural growth and achieving the town's 20-year vision for Grand Island. The final step in the process is to utilize the plan's concepts in decision-making to achieve the goals and objectives for the community. The term used for this process is "implementation."

This section of the comprehensive plan defines a series of actions by which decision-makers within the town can make the plan concepts become reality and achieve the town's vision for an attractive, rural community.

Implementation Guidelines

The recommendations for implementing the Town of Grand Island comprehensive plan are provided in Table 4. Included in the table is a task description, the timing for implementation of the task, and the elements of the task. The task description identifies each task that is recommended to implement the comprehensive plan goals and objectives. Timing refers to the necessity of some tasks to be undertaken immediately while others can occur over longer periods of time. Immediate (I) tasks are primarily non-capital intensive projects that continue the development of a broad base of community involvement. These tasks can occur within a year's time. Short-term (S) tasks will occur over a period of two to three years. These projects typically have capital investment requirements which are at levels where project initiation is feasible within a short range time period. Long-term (L) tasks include projects that will occur over a 4 to 10 year period and will likely involve several phases. Tasks may also have subcomponent programs or elements. This is particularly true for long-term programs. Elements are well-defined tasks that can be carried out as part of a program.

TABLE 4

IMPLEMENTATION ACTION MATRIX

Task Description	Lead Organization	Timing			Task Elements
		I	S	L	
LAND USE					
4.1 Authorize the Town Planning Board to mandate use of Cluster Subdivisions	T	•			• Consider "blanket" authorization, • Define criteria for when authorization can be given, or • Use on a case by case basis with authorization from the Town Board.
4.2 Create an incentive zoning system	T		•		• Consider density/floor area bonuses for contributions of open space, recreation, housing or other community goals. • Develop clearly written provisions and procedures.
4.3 Revise subdivision regulations to reflect plan concept	PB	•			• Include cluster provisions. • Integrate SEQRA review. • Provide consistency with State Law. • Integrate subdivision regulations and site plan review procedures for condominium development review; ensure consistency of approved plan with condominium offering.
4.4 Prepare a Development Guidelines Manual	PB	•			• Used by development community. • Site Plan review based on guidelines.
4.5 Amend Sewer Ordinance	E		•	•	• Eliminate cross connections. • Consolidate sewer service areas.
4.6 Develop a Landscape Ordinance	PB/T		•		• Specify treatments for developments and along roadways. • Incorporate landscape ordinance into zoning ordinance.
4.7 Revise Grand Island Code	T	•	•	•	• Revise Chapters 5, 7, 8, 14, 15, 20, 22, 24, 25, 25a, 27, 30, 36, 42, 44, 46, and 49.

NFP – Not for Profit C – Conservation Advisory Commission PB – Planning Board
E – Engineering Department T – Town S – State LRPC – Long Range Planning Committee

4.8 Update town Zoning Ordinance	T	•	•		• Begin with administrative and site plan requirements. • Revise definitions. • Modify Supplementary Regulations. • Conduct comprehensive review of Use and Special Permit Provisions. • Include Provisions for Recreation, Conservation, Office and Townhouse uses. • Finally, divide the town into logical geographic units that isolate areas of similar land uses, populations, and concerns.
4.9 Adopt Comprehensive Plan	T/PB	•			• Most often adopted by the Planning Board but can be adopted by the Town Board, giving the plan greater status as town policy. • Complete SEQR process for adoption of the Comprehensive Plan. • Make final decision on adoption.
4.10 Develop Planned Unit Development (PUD) District in Zoning Ordinance	T		•		• Allows flexibility in use and density to preserve large areas of open space. • Determine management responsibilities for common facilities.
TRANSPORTATION					
4.11 Develop Traffic Count Program for local roadways	E	•	•	•	• Utilize Engineering Department's Geographic Information System. • Incorporate State and County data. • Use system to identify areas with capacity problems. • Use results for site plan and subdivision review and SEQR process.
4.12 Develop highway and utility corridor guidelines	PB		•		• Coordinate with highway design, improvement and maintenance organizations.
4.13 Modify town Official Map	T	•	•		• Include alignments shown in Comprehensive Plan. • Prevent loss of new alignment potential by development. • Have alignment incorporated into design of land uses for each area.
4.14 Set priorities for redesign of intersections specified on the Transportation Plan	E		•		• Responsibility of Town Engineer. • Put priorities in place so that it is possible to take advantage of development plans for adjacent properties.

NFP – Not for Profit C – Conservation Advisory Commission PB – Planning Board
E – Engineering Department T – Town S – State LRPC – Long Range Planning Committee

4.15 Explore the creation of a Transportation Improvement District	T			•	• District should include the Town Center and Grand Island Boulevard. • Design transportation improvements and estimate costs based on land use proposed on Land Use Plan. • Assign costs to undeveloped land to be included as a development fee. • Generated funds to be used for only roadway improvements within district.
4.16 Develop Sidewalk Guidelines	PB	•			• Review current sidewalk provisions • Provide locational and construction regulations
4.17 Support creation of a not-for-profit land trust	NFP	•	•		• Work with land owners to preserve open space. • Use creative techniques.
4.18 Conduct habitat survey	C	•	•		• Coordinate with NYSDEC and interested groups. • Use results of survey for planning activities.
4.19 Increase "in lieu" recreation payments for subdivisions	T	•			• Develop formula for setting a fee or a per lot basis that reflects the value/cost of land in the town.
4.20 Develop open space preservation goals	C	•			• Should be undertaken by Conservation Advisory Council.
4.21 Include not-for-profit conservation groups in open space preservation process	C	•	•	•	• Identify organizations that could assist in open space preservation and management.
4.22 Prepare an Open Space Index in accordance with state law	C	•	•		• Prepared by the Conservation Advisory Council. • Utilize the Inventory and Analysis and the Comprehensive Plan as guidelines. • Submit index to Town Board for approval. • Conservation Advisory Council should obtain "Board" status. • Conservation Advisory Board will have review and recommendation authority for projects occurring on land designated in the index.
PLANNING					
4.23 Prepare conceptual Town Center plan	PB	•			• Illustrate concepts. • Prepare for development of land use regulations.
4.24 Prepare a Landscape Enhancement and Bikeway Alignment Plan	S			•	• For West River Parkway from Beaver Island to Buckhorn Island.

NFP – Not for Profit C – Conservation Advisory Commission PB – Planning Board
E – Engineering Department T – Town S – State LRPC – Long Range Planning Committee

4.25 Participate in the planning activities of regional agencies that will affect Grand Island	All Town Organizations	•	•	•	• Applicable agencies include Horizons Waterfront Commission and Niagara Frontier Transportation Council. • Ensure resource allocation reflects needs of town. • Particular attention should be paid to alternative Thruway transportation routes to bypass island. • Request that the Niagara Frontier Transportation Authority conduct a feasibility study of the alternatives to reduce congestion on the Grand Island bridges.
4.26 Develop detailed Master Plan for Ferry Village	PB	•	•		• Define geographic study area. • Appoint resident committee to provide citizen input. • Use available planning assistance.
MANAGEMENT					
4.27 Require large proposed projects to submit mapped information in compatible digital form	E		•		• Engineering Department determines computer system requirements and mapping standards.
4.28 Define Conservation Advisory Council's role	C	•			• Research on natural and cultural resources of town. • Recommendations for resource management policy. • Manage town open space resources.
4.29 Redefine Architectural Review Board role	T	•	•		• Review local enabling legislation. • Develop architectural guidelines. • Provide Board with plan approval/disapproval authority.
4.30 Educate all town agencies on the use of SEQR to implement the Comprehensive Plan recommendations	All Town Agencies	•			• Plan recommendations will be useful as mitigation measures. • Likely measures include open space preservation, habitat management, improvement of transportation resources, and provision affordable housing.
4.31 Provide local boards with ongoing planning assistance	All Town Organizations	•	•	•	• Provide planning assistance to local boards for plan implementation tasks.
4.32 Begin Planning Coordination with School District	PB	•	•	•	• Educate Board on current Comprehensive Plan. • Develop coordination mechanism for ongoing planning.
4.33 Create Long Range Planning Committee	T	•			• Composed of growth management groups • Responsible for plan reviews and updates

NFP – Not for Profit C – Conservation Advisory Commission PB – Planning Board
E – Engineering Department T – Town S – State LRPC – Long Range Planning Committee

TABLE 4A

IMPLEMENTATION ACTION MATRIX
FERRY VILLAGE SECTION

Task Description	Lead Organization	Timing			Task Elements
		I	S	L	
4.34 Adopt Ferry Village Residential Zone	T	•			• Draft provisions in accordance with Ferry Village Master Plan recommendations • Prepare EAF, Determination of Significance and, as appropriate, negative Declaration in accordance with SEQRA • Hold public hearing and adopt
4.35 Adopt town-wide Tree Conservation Ordinance	T		•		• Draft ordinance using existing models • Hold community workshops to identify revisions • Prepare EAF, Determination of Significance and, as appropriate, negative Declaration in accordance with SEQRA
4.36 Establish permanent buffer between Ferry Village and Beaver Island State Park	T			•	• Initiate negotiations with NYSOPRHP • Review easement conditions with community • Accept easements
4.37 Revise attached housing provision for residential zones	T		•		• Prepare proposed zoning amendment in accordance with Ferry Village Master Plan • Review at community workshop and revise as appropriate • Prepare SEQRA documentation • Hold public hearing and adopt
4.38 Design/Construct Ferry Road Bikeway	E			•	• Prepare conceptual design • Receive community input • Prepare TEA21 application • Complete design documents and SEQRA compliance activities • Bid and construct
4.39 Prepare Ferry Village Design Guidelines	PB		•		• Research model guidelines • Draft guidelines in accordance with Ferry Village Master Plan • Review with community and amend as appropriate • Adopt as guidelines
4.40 Design Storm Sewer Improvements	E		•		• Design storm sewer improvements for flood prone areas of Elmwood and East River Road
4.41 Design Water System Improvements	E		•		• Design 8" waterline from Water Treatment Plant to East River Road.

NFP – Not for Profit C – Conservation Advisory Commission PB – Planning Board
E – Engineering Department T – Town S – State LRPC – Long Range Planning Committee

Each of the implementation tasks identified in Table 4 are discussed in greater detail as follows:

4.1 The town Planning Board should be authorized to mandate the use of Cluster Subdivision procedure as provided in State Law. In doing so, the Town Board has several options which include:

- providing the Planning Board with "blanket" authorization to mandate clustering at their own discretion and using their own criteria. In this option, the Planning Board should establish written criteria for its use of the procedure.

- developing criteria that would define when the Planning Board could mandate clustering. The criteria could include situations when the proposed development involved land identified on the Land Use Plan as Open Space.

- limit the Planning Board to using clustering on a case by case basis with the authorization of the Town Board. Under this scenario, the Planning Board would have to go to the Town Board with a request to mandate clustering with each subdivision application they receive.

4.2 In accordance with new statewide planning legislation, the town should develop an incentive zoning system which provides density/floor area bonuses for developments which contribute to open space, recreation, affordable housing and other identified community goals. This incentive system must include clearly written provisions and procedures to avoid its use as a method for increasing densities without providing clear public benefit.

4.3 Subdivision regulations should be revised to reflect the concepts of the Comprehensive Plan. Cluster development provisions and regulations and site plan review procedures for condominium development should be integrated into the subdivision regulations, along with procedures for SEQR review. The regulations should be consistent with state law.

4.4 As an aid to the development community and to assist the Planning Board in conveying the idea of the character of development it will encourage, the town should create a Development Guidelines Manual. This manual could be used by project designers to determine site planning and subdivision requirements prior to commencing the design process. Site plan reviews undertaken by the Planning Board would be based on development conformance with design guidelines. By using these guidelines, developers would save on design costs and would know the "rules of the game" that would be used by the town in evaluating and approving their project.

4.5 Amend the Town Sewer Ordinance to require the elimination of cross connections between sump pumps and sanitary sewers. Begin to address the legal requirements for consolidating individual sewer service areas.

4.6 Design guidelines should be supplemented with a landscape ordinance that would specify landscape treatments within developments and along public thoroughfares. This landscape ordinance could be incorporated into needed modifications to the Town Zoning Ordinance.

4.7 The following sections of the Town of Grand Island Code are needed to bring the code into compliance with contemporary practice and to ensure their enforceability:

Chapter	5	Architectural Review Advisory Board
	7	Building Construction and Fire Prevention
	8	Building Construction Administration
	14	Electrical
	15	Excavation, Topsoil Removal and Landfill
	20	Mobile Homes
	22	Appliance Disposal
	24	Salvage Yards
	24(d)	Land Subdivision
	25	Licensing (Electrical & Plumbing)
	25a	Waste Disposal
	27	Plumbing
	30	Restaurants
	36	Signs
	42	Tourist Homes, Auto Courts and Motels
	44	Swimming Pool Enclosures
	46	Use, Storage and Sale of used Materials
	49	Zoning

4.8 The Town of Grand Island Zoning Ordinance is a primary tool for implementing the Comprehensive Plan. It would undergo significant scrutiny and modification in order to bring it up to modern standard and to shape it as an instrument of implementation of the plan. As a matter of strategy, the administrative and site plan requirement procedure should be done early in the modification process. This offers the town the opportunity to provide modifications which tend to be less controversial and where community consensus can be reached with relative ease. These initial modifications should include an intensive review of the definitions section of the ordinance. In many cases, this section is not updated to deal with modern development terminology and requirements. This section will, however, need additional work as the overall process unfolds. In the second phase of the modification process, the town should contemplate modifications to the Supplementary Regulations which govern specific land uses and provide special provisions for dealing with potential land use conflicts that can arise without adequate provisions. Finally, a comprehensive review of Permitted Uses and Special Permit Uses needs to be undertaken. This task will be the most time consuming but will be undertaken while the plan recommendations regarding site planning improvements are being implemented using updated provisions. This "last" zoning task should be handled by dividing the town into geographic areas that follow a logical geographic boundary. For Grand Island, this could be accomplished by dealing with all zones within the area designated for sewer service in the Comprehensive Plan or by using the Thruway as a boundary. In the Northeast corner of the town, the Town Board may decide to deal with those zones between the Thruway and the paralleling Niagara Mohawk Transmission Lines as a unit and deal with the residential uses to the Northeast as a separate unit. Geographic separation enables the community to manage the process more effectively and provide greater time for areas that have similar land uses, populations and concerns.

4.9 Consistent with amendments to Town Law (Section 274-a), which became effective in July of 1994, the Comprehensive Plan should be adopted by the town as its official guide to accommodating growth, preserving open space and providing needed amenities/facilities. Adoption by the Town Board gives the plan greater status as policy for guiding the actions of all the agencies and groups within the town on issues related to resource management.

Prior to its adoption by the town, the plan must undergo a thorough review in accordance with SEQRA. The comprehensive plan and the process followed in its development positions the town to do this efficiently by providing it with key components of an Environmental Impact Statement. Other components of the process which the town will need to consider in the adoption process include:

- development of an Environmental Assessment Form (a three part form which enables decision-makers to determine the environmental significance of the action)
- designation of a "lead agency" (normally this agency is the agency that will be adopting the plan)
- determination of environmental significance (during this process a determination will be made regarding the need for an Environmental Impact Statement)
- holding a "Scoping Session" (this session is designed to determine the substance of an impact statement and the level of study required for each of its sections)
- development and review of the Environmental Impact Statement
- holding of a Public Hearing to receive comments on the statement
- development of a Final Environmental Impact Statement and Statement of Findings
- final decision on comprehensive plan

4.10 The town should develop a Planned Unit Development District within its zoning ordinance. This section should allow flexibility in uses and densities while providing for the preservation of large blocks of permanent open space and the development of needed recreation facilities. Further, the ordinance should provide a mechanism for determining, in advance of development approval, ownership and management responsibility for all common facilities or those that will be deeded to the town.

4.11 Use the Town Engineering Department's data management system as the base for developing a Traffic Count Program for local roadways. Annual traffic count data from State and County agencies should be incorporated into this system. The system should be used to identify areas where daily or peak hour traffic is approaching highway design capacity. Further, this information should be used by the Planning Board during its site plan and subdivision review process, particularly during its discussions of traffic reduction and redirection issues. During the SEQRA review process for environmentally significant projects, this information should form the backbone of information used to identify potential problem areas and mitigating measures. As a means for effectively managing and using this information, consideration should be given to development of a Geographic Information System for the Engineering Department.

4.12 Explicit design guidelines for highway and utility corridors should be developed. These guidelines need to be coordinated with highway design, improvement and maintenance organizations.

4.13 As a first step in eliminating the "S" curve along East River Road, south of the South Grand Island Bridge, the Town should modify it Official Map to indicate the general

location and alignment of the roadway. Should a development proposal for land along this alignment arise, the Town Planning Board should ensure that realignment options not be foreclosed and, in the best case scenario, require that the development's road system incorporate portions of the proposed alignment.

4.14 The Town Engineer should establish priorities for redesigning the intersections indicated on the Transportation Plan for Redesign and Realignment. This process is necessary in order to take advantage of any development proposal on lands adjacent to these key intersections. Should development be proposed for these lands, highway alignment plans will be in place which will enable the Town Planning Board to require the proper curb lines and street improvements to ensure that needed improvements are not foreclosed by improper site planning.

4.15 Although the technique is new and not widely used in New York State, the town should explore the potential for creating a Transportation Improvement District for the area in the Town Center and along Grand Island Boulevard. Under such a district, transportation improvements needed to support the type of growth indicated in the Land Use Plan would be designed and their costs estimated. These costs would be assigned to undeveloped properties and required as a development fee at the time the parcel is developed. All funds would be designated for highway improvements within the district in accordance with the plan and could not be used for any other purpose.

4.16 Sidewalk guidelines should be developed for incorporation into site plan reviews. Existing sidewalk provisions should be evaluated and modified to meet plan recommendations. These guidelines should include provisions for locating and constructing sidewalks.

4.17 Support the creation of a not-for-profit Grand Island Land Trust. One of the main purposes of the trust would be to work with land owners to create ways of preserving open space and shaping community growth. This land trust could focus on creative preservation techniques such as Conservation Easements.

4.18 In cooperation with the New York State Department of Environmental Conservation, prepare a detailed vegetation and wildlife habitat survey that could be used by the Land Trust and by the Town in its on-going planning activities. These activities should include Comprehensive Plan Review, Subdivision Design and Site Plan Review.

4.19 In order to finance open space and recreation acquisitions and capital improvements at town recreation facilities, "in lieu" payments for subdivision lots should be studied. As an alternative, the town should consider a formula that takes the town's limit on recreation land set aside and the value of unimproved land into consideration. In this manner, the town will receive recreation fees which reflect the value/cost of land in the town.

4.20 As a method for encouraging open space preservation, the Town Conservation Advisory Council should develop preservation goals that can guide the actions of town agencies. These goals must be developed with significant input and public discussion.

4.21 As another open space preservation tool, the town should encourage the participation of not-for-profit conservation groups in its preservation efforts. Such groups could include the National Wildlife Federation, Ducks Unlimited, The Audubon Society and the Buffalo Ornithological Society. Such groups have the ability to manage open space

resources that will benefit residents of the town, particularly those that value open space resources.

4.22 Using the inventory of physical and cultural resources for the town, prepared as Phase I of the comprehensive plan, the Conservation Advisory Council should prepare an Open Space Index in accordance with State Law. This index *(which should include the Open Space/Natural Habitat category on the plan map)* can then be submitted to the Town Board for its review modification and approval after which the Council can be qualified as a Conservation Advisory Board. With this status the new Board will have the authority to review and recommend action on development proposals that involve lands designated on the index.

4.23 Prepare a conceptual Town Center Plan to illustrate the Town Center concept and prepare for development of land use regulation issues.

4.24 Prepare a landscape enhancement and bikeway alignment plan for West River Parkway from Beaver Island State Park to Buckhorn Island State Park.

4.25 The town Planning Board and Town Board should participate in the planning activities of regional agencies that have an impact on development and capital expenditures/allocations effecting Grand Island. Those agencies should include the Horizons Waterfront Commission and the Niagara Frontier Transportation Council. Working relationships with these agencies will enable the town to influence regional decisions as they effect the town and to ensure that regional resource allocation takes the needs of Grand Island into full consideration. Of particular concern should be the establishment of alternative routes to use of the Thruway across the island. An alternative could reduce traffic congestion at the South Grand Island Bridge.

4.26 A detailed master plan should be developed for the Ferry Village community. This should be accomplished by using available planning assistance and by appointing a resident committee that will provide citizen input.

4.27 For major development projects, the town should require submission of mapped information in digital form that is compatible with the Town Engineer's CADD system. This requirement would reduce staff costs for project review and tracking and speed the project review process.

4.28 The Conservation Advisory Council's role in the growth management process should be clearly defined. Roles that have emerged as a result of their participation in the comprehensive plan review process include: doing original research on the natural and cultural resources of the town, recommending resource management policy to other town agencies that deal with growth management issues, and managing town conservation and open space resources. This management responsibility would be clearly separated from the management responsibilities of the town Recreation Commission over active recreational facilities.

4.29 An Architectural Review Board has been established with its powers and duties created within the framework of the Town Zoning Ordinance. The Board should have the authority to review proposed structures within commercial, industrial and multifamily residential zones. One of its first orders of business should be to develop architectural guidelines for use by builders during the design process. These guidelines should also be referenced by the Review Board during its review of development projects.

4.30 All town agencies should be educated in the opportunities for plan implementation provided by the New York State Environmental Quality Review Act (SEQRA). The primary purpose of that legislation is to provide for the balancing of environmental issues with economic and social concerns. The law provides for a process where adverse impacts of an action are assessed and where measures to mitigate those impacts can be identified. It is through this process that town officials can identify provisions to be incorporated into their decisions that not only mitigate adverse impacts but also implement the recommendations of the comprehensive plan. Plan provisions that are amenable to this implementation approach include the preservation of open space, management of critical natural and wildlife resources, improvement of impacted transportation resources and provision of affordable housing options.

4.31 Local boards should be provided with professional planning assistance in carrying out various tasks assigned to them for the implementation of the Comprehensive Plan.

4.32 The Grand Island School District should be educated on the provisions of the Comprehensive Plan by the Planning Board. A coordination mechanism should be established for ongoing planning.

4.33 The Town Board should create a Long Range Planning Committee with representation from each Town board, commission, and agency having jurisdiction or authority for growth management issues and community services with the Town of Grand Island. At the discretion of the Town Board, this committee may be supplemented with representatives of neighborhood or community groups. The committee should have the responsibility for ensuring that the Town of Grand Island Comprehensive Plan is reviewed annually to identify and recommend appropriate modifications, if any. Further, the Long Range Planning Committee will be responsible for an in-depth 5-year review of the plan and oversee a 20-year comprehensive update.

4.34 In order to accomplish a major element of the Ferry Village Master Plan section of the Comprehensive Plan, the Town Board should adopt zoning ordinance language to establish a Ferry Village Residential Zone designed to provide the residential area south of Ferry Road with regulations that will permit reconstruction of dwellings in-kind, if substantially destroyed. Those provisions should remove the existing residences non-conforming status under current regulation

4.35 The Town Board should prepare and adopt a Tree Conservation Ordinance that can be applied town-wide. Those regulations need to address issues of clear-cutting and street tree replacement.

4.36 Preservation of a buffer between park and residential uses in Ferry Village requires negotiation of an agreement with the State of New York regarding the creation of a 100-foot conservation easement along the perimeter of Beaver Island State Park where there is a common boundary with parcels within Ferry Village.

4.37 Revision to attached housing zoning regulations that are consistent with the recommendation of the Ferry Village Master Plan should be prepared and adopted by the Town Board.

4.38 The Town needs to prepare conceptual designs and cost estimates for the bikeway along the north side of Ferry Road and submit an application for funding under TEA21. This

process requires that the Town continue to monitor the reauthorization of federal legislation.

4.39 Design guidelines for public and Architectural Review Board review of proposed developments in Ferry Village should be prepared, modification as appropriate, and adopted.

4.40 The Town Engineering Department should prepare a design and construction document for improvement to storm sewers for the Elmwood and East River Road flood-prone areas.

4.41 Engineering should, similarly, prepare a detailed design, construction documents, and bonding instruments for replacement of the 8-inch water line from the treatment plan to East River Road.

APPENDIX -
LIST OF APPROVED SUBDIVISIONS

SUBDIVISION ACTIVITY FROM 1987 ±

PREPARED 10/12/89

UPDATED 11/27/90

File Number and Subdivision Name	Geographic Location	Master Plan	Lots Improved	Lots Vacant	Lots Built
1.0 Towerwood & Bronson	E. side E.R.R.N. of Bush	B	---	0	---
2.0 Grand Island Manor	Falconwood Area	B	---	0	---
3.0 Buckhorn Estates	E. of Baseline btwn. Huth & E.R.R.	28	28	0	28
4.0 Downsview Acres	N. side Bedell - E. of Town Park	80	31	27	4
5.0 Whitehaven Acres	S. side Whitehaven - W. of Meadow Lane	5	5	0	5
6.0 Countryside Manor	W. side Baseline - N. of Fix	B	---	0	---
7.0 Rob Roy Park	W. Side Baseline - N. of Bedell	103	10	5	5
8.0 Eastern Subdivision	S. side Long @ Baseline	B	---	0	---
9.0 Grand Park Vue Estates	N. side Long opposite Morningside	141	29	10	19
10.0 Beaver Heights	W. side of E.R.R. - N. of Fix	B	---	0	---
11.0 Amberwood Estates	S. side Huth - E. of Baseline	B	---	0	---
12.0 Dolphin Estates Grand Island Commons	S. side Fix - E. of S. Parkway W. side E.R.R.- S. of Fix & Marlin Ct.	52	33	19	14
13.0 New England Village	S. side Ransom - E. of High School	177	22	20	2
14.0 Island Estates	S. side Bedell - E. of Baseline	B	---	0	---
15.0 Island Gardens	S. side Huth - W. of Stony Point	B	---	0	---

B = Built

File Number and Subdivision Name	Geographic Location	Master Plan	Lots Improved	Lots Vacant	Lots Built
16.0 Morningside	S. side Long - E. of G.I. Boulevard	25	0	0	0
17.0 Fernwood Gardens	E. side Baseline - S. of Fix	23	23	6	17
18.0 Creekside Ridge	E. side Baseline - S. of Marjorie	26	26	0	26
19.0 Melrose Estates	E. side E.R.R. opposite Beaver Lane	B	---	0	---
20.0 Stonecrest	W. side Stony Point S. of Bedell	B	---	0	---
21.0 Fareway Heights	W. side of Baseline - S. of Fix	B	---	0	---
22.0 Stony Point Acres	E. side Stony Point - S. of Huth	B	---	0	---
23.0 Havenwood Estates	N. side of Long - W. of Baseline	B	---	0	---
24.0 River Meadows	W. side Baseline - S. of Long	B	---	0	---
25.0 Christopher Park	S. side Whitehaven - E. of G.I. Boulevard	71	0	0	0
26.0 Whitehaven Meadows	S. side Whitehaven - W. of 1 Mg. Water Storage Tank	53	0	0	0
27.0 Ransom Estates	N. side Ransom - E. of Stony Point	319	16	5	11
28.0 Spicer Creek Estates	S. side Meadow Land	38	7	2	5
29.0 Ransom Village	S. side Ransom - W. of High School	161	62	7	55
30.0 Woodstream Meadows	E. side Baseline - S. of Long Road	126	72	10	62
31.0 Pinewoods Sub.	S. side Whitehaven - E. of Stony Point	15	4	1	3

B = Built
NS = Not in Sewer District

File Number and Subdivision Name	Geographic Location	Master Plan	Lots Improved	Lots Vacant	Lots Built
32.0 Regency Park	W. side Stony Point - N. of Bedell	B	---	0	---
33.0 Rolling Meadows	S. side Huth - W. of Stony Point	B	---	0	---
34.0 Edgemont Estates	E. side of Baseline	B	---	0	---
36.0 River Oaks Landings	W. side E.R.R. - N. of Whitehaven				
36.1 Oakmont Colony Town Houses	W. side E.R.R. - N. of Whitehaven	42	42	0	42
36.2 Cardinal Hoses	N. side Whitehaven - W. of Spicer Creek				
36.3 Willowbrook Sub.	E. Side Harvey - S. of Whitehaven	14	14	3	11
36.4 River Oaks Sub.	W. side E.R.R. - N. of Whitehaven	1024	81	32	49
36.6 Fairway Greens Phase 1	W. side E.R.R. - N. of Whitehaven	22	22	0	22
36.7 Fairway Greens Phase 2	N. side Whitehaven - E. of Spicer Creek	74	0	0	0
37.0 Hanna Heights	E. side E.R.R. of Fix	B	---	0	---
38.0 Raleigh Estates	N. side Bedell - E. of Baseline	B	---	0	---
39.0 Regency Manor Apartments	N. side of Bedell- E. of G.I. Boulevard	B	---	0	---
40.0 Island Village Apartments	N. side Bedell - W. of Powerlines	B	---	0	---
41.0 Town Hall Terrace Apartments	W. side Baseline - N. of Whitehaven	B	---	0	---
42.0 Baseline Acres	E. side Baseline - S. of Fix	B	---	0	---
43.0 Huth Road Estates	N. side Huth - W. of Stony Point	B	---	0	---
44.0 Mill Pond Green	N. side Bedell - W. of Stony Point (Downsview Sub.)	B	---	0	---

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File Number and Subdivision Name	Geographic Location	Master Plan	Lots Improved	Lots Vacant	Lots Built
45.0 Shamrock Estates	E. side Baseline - N. of Fix	B	---	0	---
46.0 Pellamwood Estates	S. side Huth opposite Huth Rd. School	32	32 underway	10	22
47.0 Royal Oak	N. side Fix between Baseline & Parkway	22	22	0	22
48.0 Riverview Heights	N. side Fix between S. Parkway & E.R.R.	35	35	34	1
49.0 Lang Farm	N. side Long - E. of G.I. Boulevard	72	6	1	5
50.0 Marletti	W.side E.R.R. of Love	B	---	0	---
51.0 Forest Park NS	W. side Baseline between Bush & Ferry	14	14	6	8
52.0 Champlain Landings NS	S. side Whitehaven - E. of Big Six Creek	9	9	3	6
53.0 Waterside Park NS	W. side E.R.R. - S. of Winkler	8	8	3	5
54.0 Staley Farms NS	S. side Staley btwn. Baseline & Alt	29	29	16	13
55.0 East Riverside Woods	E. of Harvey between E.R.R. & Whitehaven	151	141	30	111
56.0 Meyer-Sheenwater Estates NS	N. side Love - E. of W.R.R.	11	11	4	7
57.0 Isle Grande	E. side G.I. Blvd. - N. of Industrial Dr.	---	---	0	---
59.0 Stonypoint Sub. NS	E. side Stony Point - N. of Staley	11	11	4	7
60.0 Mohawk Manor (1986)	S. side Long - E. of G.I. Boulevard	3	3	0	3
61.0 Mikall Sub.	S. side Harvey - W. of Williams	6	6	1	5
62.0 Bedell Road	S. side Bedell -	7	7	3	4

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NS = Not in Sewer District

File Number and Subdivision Name	Geographic Location	Master Plan	Lots Improved	Lots Vacant	Lots Built
Farm Sub. NS	E. of W.R.R.				
63.0 Grand Manor NS	S. side E.R.R. - E. of Stony Point	9	9	1	8
64.0 Offerman Sub. NS	W. side E.R.R. - S. of Ransom	4	4	0	4
65.0 Bedell Manor NS	S. side Bedell - E. of W.R.R.	4	4	1	3
66.0 Elibol Farms NS	W.R.R. - S. of Whitehaven	5	5	0	5
67.0 Loreli Sub.	N. side Staley - E. of Nike Base	4	4	3	1
68.0 Brookhollow Sub.	W. side Stone Point - N. of Ransom	66	0	0	0
69.0 Sheehan Farms NS	N. side Love - W. of Baseline	3	3	2	1
70.0 Flanigen Estates	S. side Whitehaven - W. of Meadow Lane	16	16	12	4
71.0 North Points Sub.	S. side Long - E. of W.R.R.	4	4	4	0
72.0 Cross Roads	N.E. corner Baseline and Bedell	6	6	5	1
73.0 Spicer Creek Townhouses	S. side Whitehaven - E. of Harvey	54	0	0	0
74.0 Island Park	E. side Baseline - N. of Bedell	23	0	0	0
75.0 Gun Creek	N. side Whitehaven - E. of Stony Point	170	0	0	0
76.0 West Riverview Sub. NS	N. side Bedell - E. of W.R.R.	8	8	6	2
77.0 Whispering Meadows	E. side Stony Points- N. of Ransom	66	7	5	3
78.0 Park Place	E. side of Harvey -	90	0	0	0

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File Number and Subdivision Name	Geographic Location	Master Plan	Lots Improved	Lots Vacant	Lots Built
	S. of Spicer Creek				
79.0 Waterford Park	N. side Fix between S. Parkway & E.R.R.	77	0	0	0
80.0 Forest Creek	S. side Whitehaven - E. of Harvey	35	0	0	0
81.0 The Cove	E. side East River Road - S. of North Colony	4	0	0	0
86.0 Rockwood Subdivision	N. side of Love Road West of Baseline	6	6	4	2
88.0 Independence Square	W. side of Stony Point S. of Bedell Road	42	0	0	0
89.0 Seaside Village	S. side of Bedell W. of Stony Point	16	0	0	0
Total		3741	937	305	633

B = Built
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