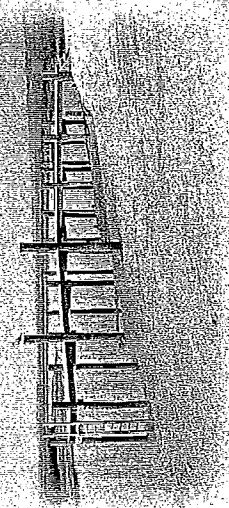
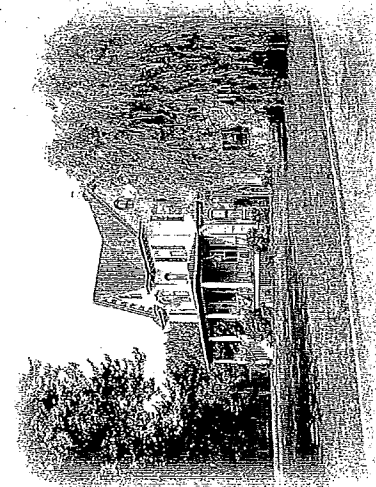
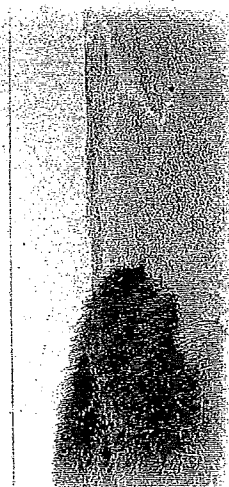


CITY OF
Linwood

MASTER PLAN
ATLANTIC COUNTY NEW JERSEY



2002

**HEYER, GRUEL
& ASSOCIATES**
COMMUNITY PLANNING CONSULTANTS

CITY OF
Linwood

MASTER PLAN
ATLANTIC COUNTY NEW JERSEY

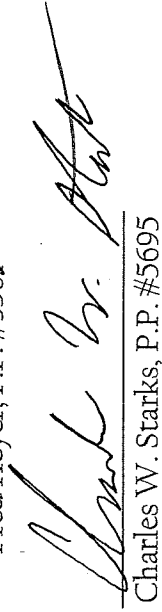
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sealed in accordance with N.J.S.A. 45:14A-12.


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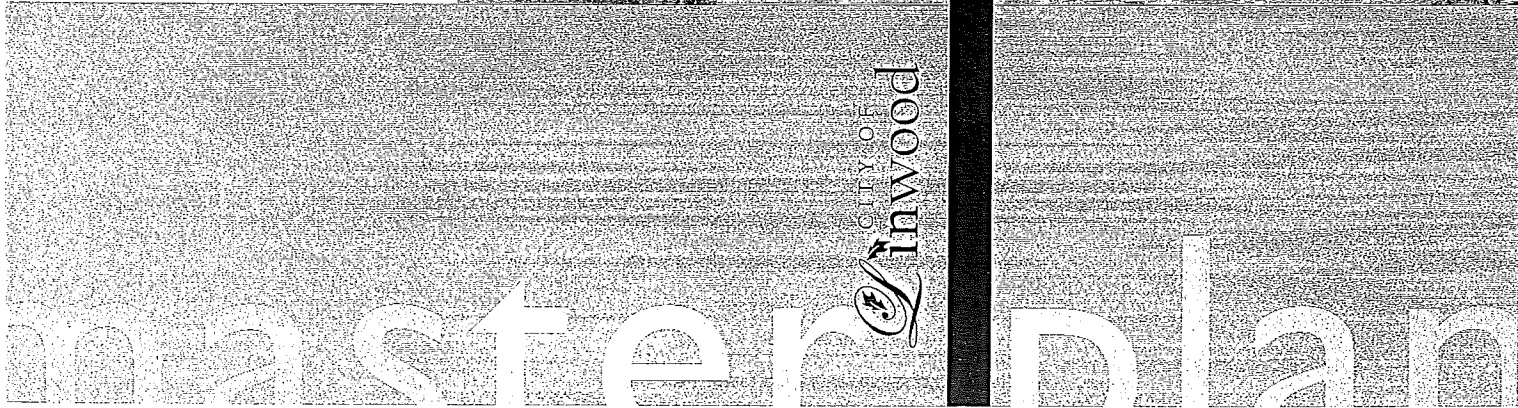

Charles W. Starks, P.P. #5695

2002

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Master Plan



INTRODUCTION AND GOALS OVERVIEW OF THE CITY

The City of Linwood is a developed residential community of 3.8 square miles with a population of 7,172. The City is characterized by a historic central core, attractive residential and commercial areas, and large areas of marshland bordering the neighboring Scull's Bay and Patcong Creek. Located 9 miles west of Atlantic City in southern Atlantic County, New Jersey, Linwood serves as a desirable bedroom community for the rapidly developing surrounding region.

Between 1990 and 2000, the City of Linwood grew by 306 people, or 4.5%. As shown in Table 1, the population growth rate in the City was lower in 1990-2000 than in the previous decade, even as the State's growth rate increased. Atlantic County continues to expand at a faster rate than the City. The City has benefited economically from this regional and statewide growth, but it is also affected by impacts from that growth, including traffic, development pressure on infill sites, and increased demand for public services.

Table 1: Population, 1980-2000

Year	City of Linwood		Atlantic County		State of New Jersey	
	Population	% increase	Population	% increase	Population	% increase
1980	6,144	--	194,119	--	7,365,011	--
1990	6,866	11.8%	224,327	15.6%	7,730,188	5.0%
2000	7,172	4.5%	252,552	12.6%	8,414,350	8.9%

Source: U.S. Census Bureau

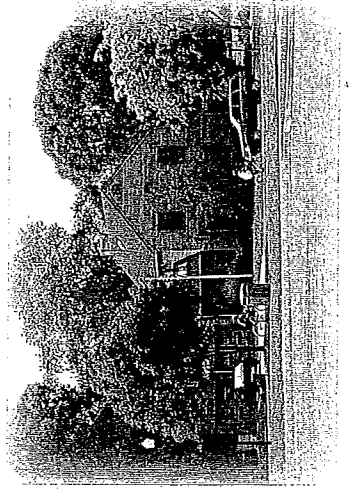
ABOUT THE MASTER PLAN

The overall intent of this Master Plan is to preserve and enhance Linwood's residential character by protecting existing residential developments, encouraging new development appropriate to the character and scale of Linwood, and providing community facilities and amenities that meet the needs and expectations of Linwood residents.

The Plan includes eight elements: Goals and Objectives, Land Use, Community Facilities, Circulation, Parks and Recreation, Conservation, Historic Preservation, and Relationship to Other Plans.

This Master Plan is the first new Master Plan prepared for the City of Linwood since 1978. Since that time, the City has conducted Master Plan Reexamination Reports in 1988 and 2001 and a Master Plan Revision in 1995. The City of Linwood also completed a Housing Element in 2001. The Goals in this Master Plan have been updated and revised to reflect the current issues faced by the City.

While the City's vision for itself as a desirable residential community has not changed significantly since 1978, the issues affecting that vision have changed. The City has largely reached build-out in the time since the 1978 Master Plan, adding approximately 1,000 residents, while the population of Atlantic County has increased by approximately 60,000 and continues to rise. The number of available vacant sites for new construction has dwindled during the last 24 years. No major new residential developments are anticipated, and while the City has continued to add population, the growth rate has declined. The focus of commercial development has shifted from new construction on vacant land to retrofitting obsolete commercial sites. Meanwhile, the aging of the City's community facilities has led to the replacement of City Hall and the disuse of the Poplar Avenue School. The City's awareness of its history has also increased with the designation of a Historic District on Shore Road and the formation of a Historical Society which operates two museums.



GOALS AND OBJECTIVES

The City of Linwood's Master Plan is based upon a set of goals and objectives which have been developed over time by the Linwood Planning Board and other City boards and agencies. These goals and objectives relate to each of the plan elements: Land Use, Community Facilities, Circulation, Parks and Recreation, Conservation, and Historic Preservation.

I. LAND USE

- Maintain, preserve, and enhance the existing established residential character of Linwood.
- Develop strategies to limit the potential for incompatible subdivision of land in infill areas.
- Identify potential revisions to the Zoning Ordinance to improve the consistency of residential zoning districts.
- Limit residential development in Planned Commercial districts.
- Avoid strip commercial development on New Road and other major streets.
- Avoid the intrusion of business uses into residential zoning districts.
- Ensure that commercial development fits in well with the character and scale of Linwood.
- Address redevelopment of the former Prudential site and other underutilized commercial sites.

2. CIRCULATION

- Take necessary measures to mitigate the effects of increased regional traffic.
- Employ traffic calming measures to retain the character of the City.
- Ensure that the needs of bicyclists and pedestrians are met.

3. COMMUNITY FACILITIES

- Maintain and enhance the existing high level of community facilities consistent with the character and development of the City.
- Identify uses for municipally owned facilities, particularly the Poplar Avenue school site.
- Expand school facilities in a way that keeps pace with enrollment while respecting community character.

4. PARKS AND RECREATION

- Maintain and expand the City's parks and recreation system to meet the recreation needs of Linwood residents.
- Expand the bike trail to serve residential developments west of New Road.
- Develop active and passive recreation facilities on newly acquired sites.

5. CONSERVATION

- Use all available tools to protect the City of Linwood's natural resources as the community continues to mature.
- Complete a Natural Resources Inventory for the City.
- Enhance the protection of the meadowland in its current state.
- Protect and enhance environmental features in the developed areas of the City.
- Identify additional open space sites for acquisition.
- Identify funding sources to acquire additional open space.

6. HISTORIC PRESERVATION

- Encourage awareness and protection of Linwood's cultural, social, and historic heritage.
- Respect the Linwood Historic District when making land use policies and decisions.
- Consider additional historic properties for protection under the National or State Registers of Historic Places.



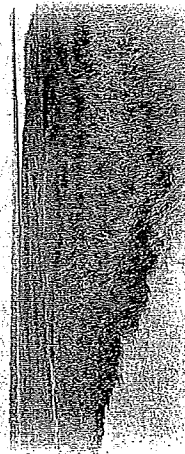
LAND USE

INTRODUCTION

The City of Linwood is a largely developed residential community, 3.8 square miles in area, consisting of a central, developed, upland area, with undeveloped marshland bordering Scull's Bay on the east and Patcong Creek on the west. The developable area of the City is almost fully built-out; little vacant land remains outside the marshland.

INTRODUCTION

The City of Linwood is a largely developed residential community, 3.8 square miles in area, consisting of a central, developed, upland area, with undeveloped marshland bordering Scull's Bay on the east and Patcong Creek on the west. The developable area of the City is almost fully built-out; little vacant land remains outside the marshland.



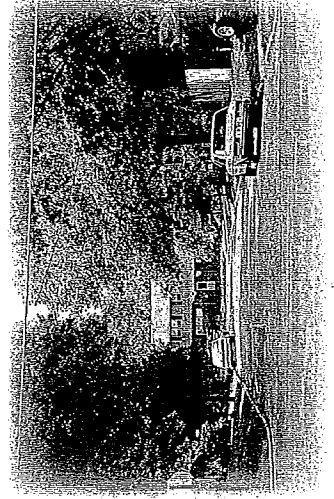
The City's land use pattern within the upland area is defined by three major corridors that run through the City from north to south. On the east is Shore Road, a two-lane collector street that forms the core of historic Linwood, with many historic homes and a few small-scale nonresidential uses. Shore Road also connects the City to the adjacent communities of Somers Point and Northfield. The central corridor is a former interurban railroad line, which has been converted into a bicycle path. The western corridor is New Road, an arterial street which also connects to neighboring communities and is characterized by larger freestanding commercial developments such as the former Prudential site, the Linwood Professional Plaza and similar office parks, and a few retail centers.

The New Road and Shore Road corridors divide the City into three distinct parts. The area east of Shore Road is almost entirely residential and is characterized by larger homes on somewhat larger lots than in most other areas of the City. This area also includes the Linwood Country Club. The section between New Road and Shore Road is the heart of the community and includes many residences as well as most of the City's community facilities, including City Hall, the Linwood Public Library, and the City's three public schools. West of New Road is the Linwood Convalescent Center—the City's major employer—and a mix of new and older housing developments.

EXISTING LAND USE

Residential

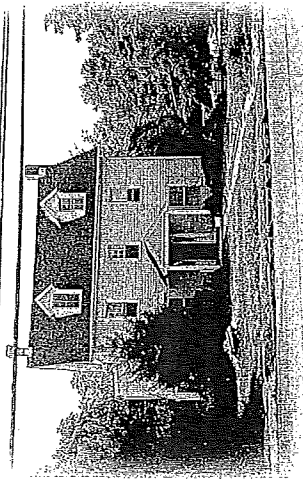
The City of Linwood is predominantly a developed, single family residential community with lots ranging from approximately 5,000 to 30,000 square feet in area within a street network consisting of a modified gridiron that was developed from the 19th century to the mid 20th century. Most residential areas consist exclusively of single-family homes. Some two-family developments from the mid- to late 20th century have been developed near the City's borders with Somers Point and Northfield.



SINGLE-FAMILY RESIDENTIAL AREAS

East of Shore Road

The portion of the community east of Shore Road consists largely of single-family residences on medium sized to relatively large lots (over 10,000 to over 30,000 sq. ft. in area). The area is characterized by convenient access to the meadowland bordering Scull's Bay, and some homes have expansive views of the bay and marsh.



Historic District

The Historic District along Shore Road and surrounding streets includes historic single-family dwellings on lots of varying sizes dating to the late 19th and early 20th centuries. More information on the Historic District is contained in the Historic Preservation Element of this Master Plan.

From Shore Road to New Road

The area between Shore Road and New Road consists mainly of early to mid-20th century single-family residential dwellings on lots ranging from under 10,000 square feet to approximately 30,000 square feet. In general, dwellings in this area are somewhat smaller than those located east of Shore Road, though there are some sections of larger dwellings and lots.

West of New Road

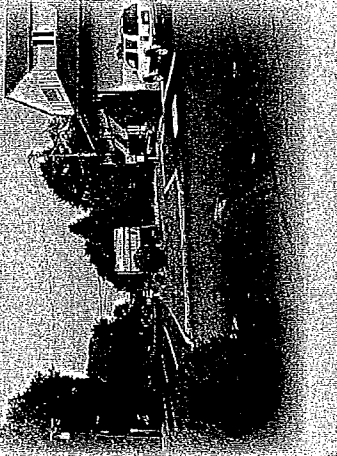
The area west of New Road and Oak Avenue includes some newer residential subdivisions from the late 20th century which are characterized by curving streets and cul-de-sacs. It also includes older residential areas between Monroe Avenue and Barr Avenue. In general, this area includes newer homes than the area east of New Road. The area includes relatively new residential developments in the PR (Planned Residential) zone, described below, as well as older housing developments.

TWO-FAMILY RESIDENTIAL AREAS

Several areas on Linwood's northern and southern boundaries are developed with two-family residential developments. These developments serve an important function as a source of smaller dwelling units for those who do not need a detached single-family residence. Some undeveloped land remains in these areas, which are zoned Dwelling C, described below. These land uses are stable and well established.

COMMERCIAL

The City of Linwood contains two corridors with commercial uses: New Road and Shore Road. Both also have significant residential uses. New Road is a modern, auto-oriented commercial and residential corridor, while Shore Road is an older residential thoroughfare punctuated by nodes of small-scale commercial development.



NEW ROAD

New Road is the City's primary commercial corridor and forms part of a larger commercial corridor extending through several communities in southern Atlantic County. The stretch of New Road in Linwood is notable because it has retained considerable tree cover as development has occurred, and most development has remained relatively small-scale. New Road includes several office buildings, small office complexes and small shopping centers. Several high-quality office developments have been constructed on New Road in recent years. The road also includes older developments that have become vacant or underutilized, most notably the former Prudential building across from Mainland Regional High School.

New Road also continues to include residential uses between Oak Avenue and the former Prudential site and between Patcong and Seaview avenues. Often, market conditions result in the conversion of residential structures on arterial streets to uses such as personal service businesses and professional offices. This area is currently zoned for residential use only. We examined the possibility of rezoning the residential area of New Road but determined that no changes are currently needed, as the residential uses in this area remain viable.

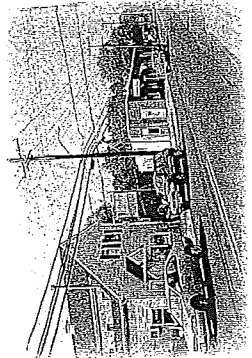
SHORE ROAD

While predominately a residential street, Shore Road has a few commercial uses such as personal service establishments and offices located mainly at intersections with collector streets such as Poplar Avenue, Maple Avenue, and Seaview Avenue. Some of these commercial areas are non-conforming uses located in residential zones, but they have only a limited impact on the surrounding area due to their small size. Notable commercial uses include a cluster of small retail shops at Maple Avenue and Shore Road.

The Linwood Country Club with its 18-hole golf course borders the east side of Shore Road in northern Linwood.

MEADOWLAND

The developed portion of Linwood is bordered on the east and west by large areas of marshland which themselves border Sculls Bay and Patcong Creek. While these areas have been altered in the past, they are almost entirely undeveloped. Particularly on the Linwood's east side, much of the meadowland has been purchased by the City for the purposes of conservation. Human activity in the meadowland is largely confined to three boat docks, which are reached by unpaved roadways.



EXISTING ZONING

Single Family Residential Zones

There are two main single-family residential zones: the Dwelling A zone and the Dwelling B zone. The A zone standards are as follows:

- ⊗ Minimum lot size: 10,000 square feet
- ⊗ Minimum width: 100 feet
- ⊗ Minimum depth: 100 feet
- ⊗ Minimum front yard setback: 20 feet
- ⊗ Minimum rear yard setback: 20 feet
- ⊗ Minimum side yard setback: 10 feet
- ⊗ Maximum principal building coverage: 30 percent
- ⊗ Maximum lot coverage: 40 percent
- ⊗ Maximum height: 25 feet within 20 feet of the property line; 35 feet elsewhere.

The B zone standards, which were modified in 2002, are more restrictive. The 2002 modifications removed a provision in the ordinance which permitted lots in the B zone that complied with only the less restrictive A-zone standards under certain circumstances. There is no maximum height requirement.

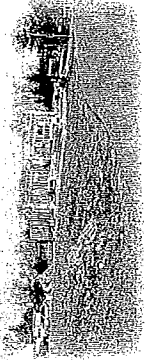
- ⊗ Minimum lot size: 15,000 square feet
- ⊗ Minimum width: 100 feet
- ⊗ Minimum depth: 100 feet
- ⊗ Minimum front yard setback: 25 feet
- ⊗ Minimum rear yard setback: 25 feet
- ⊗ Minimum side yard setback: 25 feet
- ⊗ Maximum principal building coverage: 25 percent
- ⊗ Maximum lot coverage: 35 percent

There are more restrictive B zone standards for flag lots and lots using lanes or private drives for access:

- ⊗ Minimum lot size: 30,000 square feet, with a minimum unconstrained building envelope of 10,000 square feet
- ⊗ Maximum principal building coverage: 20 percent
- ⊗ Maximum lot coverage: 30 percent
- ⊗ Setbacks are the same as for regular B zone lots, but there are no lot width or depth requirements.

Although B-zone lots are generally larger than A-zone lots, in many areas of the community there is not a clear correlation between lot size and the A and B zone boundaries. This issue was partly addressed in 2002 by an ordinance rezoning most of Sara Ann Court and the block bounded by Sunset Avenue, Shore Road, and Myrtle Avenue from B to A. Still, areas of inconsistency remain, particularly east of Shore Road and west of New Road.

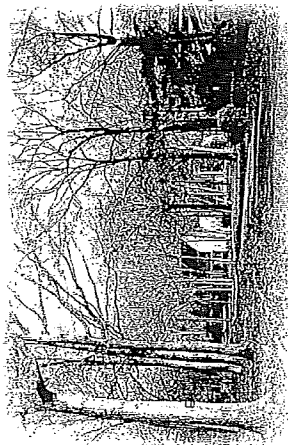
The 2002 ordinance revisions also enacted a "grandfathering" clause which permits any pre-existing lot of 15,000 square feet or less to be developed with a single family home.



COMMERCIAL ZONES

Planning Issues in the A and B Residential Zones

As noted above, there is not a clear correlation between existing lot size and residential zoning in certain areas of the City, particularly east of Shore Road and west of New Road. Lots greater than 10,000 square feet should be protected to prevent re-subdivision as regional demand for housing increases.



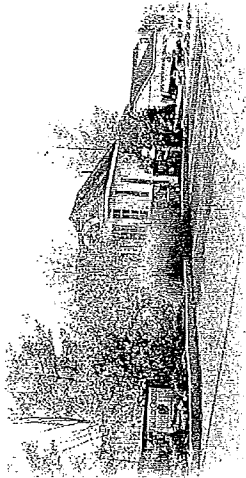
Two-Family Zone

Linwood's most dense residential zoning classification, the Residential C zone is designed to permit development of two-family structures and complexes. The City has designated areas near the borders with Northfield and Somers Point as C zones, including areas along Ocean Heights Avenue from south of Shore Road to Patcong Creek; West Avenue from New Road to Ocean Heights Avenue; and Wabash Avenue from Marvin Avenue to the border.

Planned Residential Zone

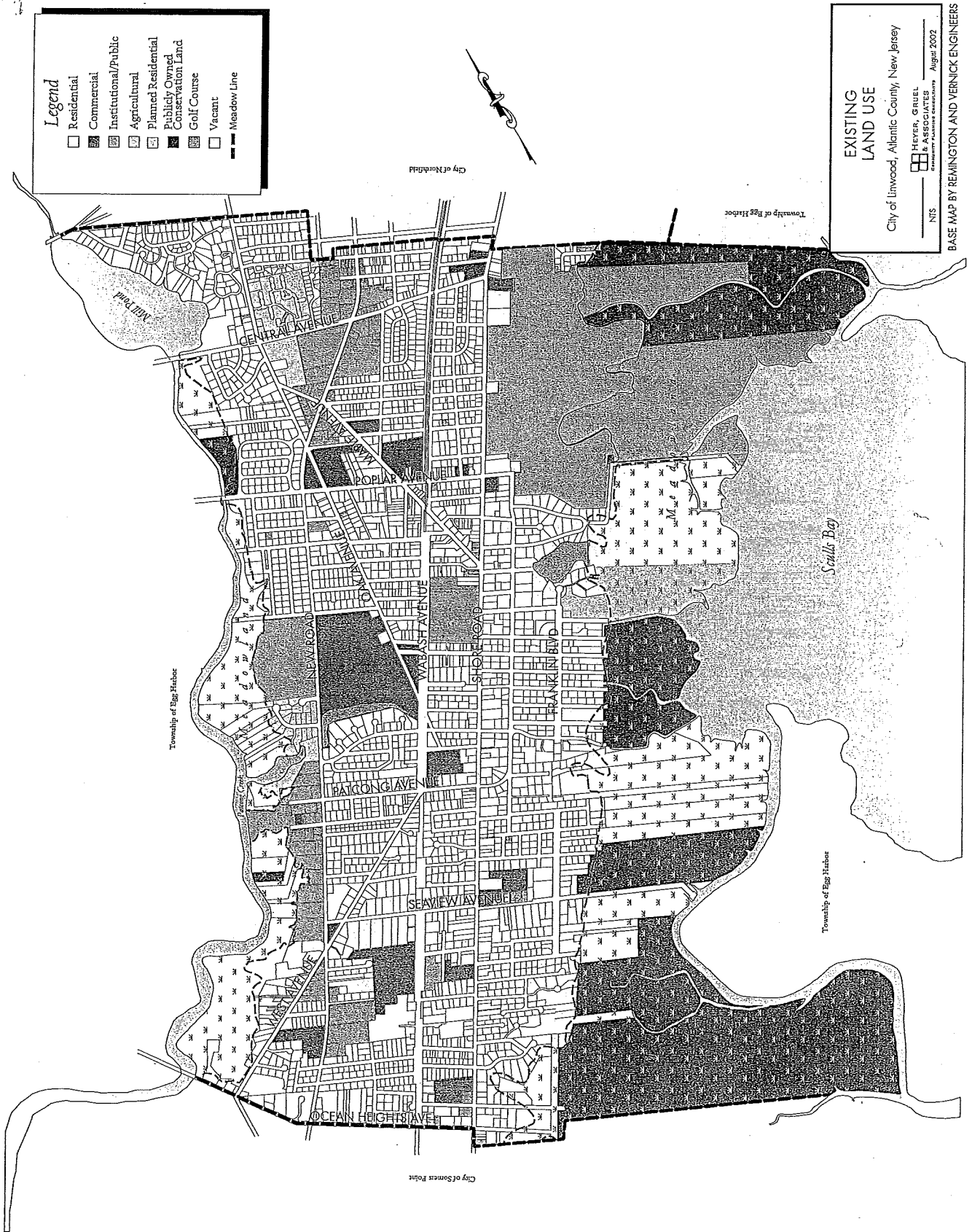
Two areas of Linwood have been zoned as Planned Residential (PR). One such area is located on the north side of New Road at School House Lane. A portion of this area has been developed recently as a single-family residential subdivision. The second area, located on the north side of Oak Avenue at Vernon Avenue, has also been developed as a single-family residential subdivision.

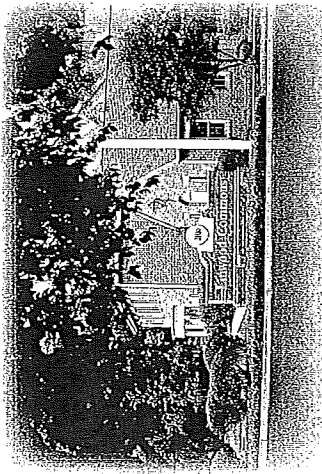
The PR zone permits residences that correlate with the A-zone standards as well as cluster development at five units per acre on tracts with a minimum of five acres.



The City has three zone classifications which permit commercial uses: Limited Business, Planned Commercial Development, and Planned Development. Limited Business (LB) zones include the intersection of New Road and Maple Avenue, the intersection of Shore Road and Maple Avenue, the north side of New Road from Patcong Avenue to Forest Drive, and the south side of New Road at Melody Lane. In general, commercial uses in the LB zones are smaller, older, and have fewer design amenities than those in the other commercial zones. Permitted uses in the LB zone include restaurants, offices, banks, retail stores, and similar uses, as well as government buildings, churches, repair shops, theatres, and other miscellaneous uses.

Planned Commercial (PC) zones include the area around the intersection of Central Avenue and New Road, the former Prudential site across New Road from Mainland Regional High School, the north side of New Road from Patcong Avenue to School House Drive, and the triangle formed by West Avenue and New Road. The PC zones include most of the City's employment centers and commercial complexes. The PC zone permits only restaurants, offices, and retail. The PC zone also includes special performance standards for setbacks, coverage, minimum floor area, and parking.





The Linwood Convalescent Center at Central and Oak avenues is also located in the PC zone. The Convalescent Center is the City's largest employer. The facility provides inpatient and outpatient rehabilitation services, long-term and geriatric care, ventilator care and management, and hospice respite care. Unlike the PC zone, the Planned Development (PD) zone permits residential as well as commercial uses. The City has three locations that are zoned for Planned Development:

- The north side of New Road between West Avenue and Joseph Avenue.
- The northern portion of the South Jersey Industries property on the south side of New Road.
- Several residential properties along Central, Warren, and Marvin avenues.

The wide range of uses permitted in the zone has resulted in a lack of a clear vision for the sites. Also, the sites on Central, Warren, and Marvin Avenues are too small to accommodate the large-scale planned development uses envisioned by the City's Planned Development ordinance.

The City is currently considering several PD- and PC-zoned areas for redevelopment. The Council has authorized the Planning Board to undertake a redevelopment study for the former Prudential site, which is in the PC zone, and for one parcel in the PD zone totaling approximately 7 acres located on the north side of New Road at Patcong Avenue.

Recreation Zone

The Linwood Country Club, located adjacent to Shore Road north of Poplar Avenue; most of the City's parks; the bike path; and the MRA tennis facility and sports club, located on Central Avenue near Mill (Bargaintown) Pond, are zoned Recreation. No changes are expected for these uses.

Conservation Zone

Most of the City's meadowland is located inside the Conservation zone. This zone is extremely restrictive, permitting only essential public utilities. Much of the Conservation zone bordering Sculls Bay has been purchased by the City for permanent conservation.

Institutional Zone

Many of the City's publicly owned buildings, houses of worship, and other quasi-public structures such as the Masonic Hall are located in the Institutional zone. These uses are long-established and unlikely to change significantly in the future.

COMMUNITY DESIGN

Community design standards are typically adopted as part of a land use ordinance to promote a functional and desirable visual environment, particularly in areas with higher intensity uses such as commercial zones and multifamily residential developments. They ensure that new developments employ consistent aesthetic standards, preserve tree cover, provide adequate landscaping, and promote safe and comfortable pedestrian and vehicular movement. Design standards can control a wide range of elements, for example:

- Layout and design of new streets and parking lots
- Setbacks and buffering standards
- Locations and widths of sidewalks and other pedestrian and bicycle ways
- Design architectural details, colors and materials used on structures and walls
- Shade tree and landscaping requirements
- Lighting requirements
- Location, size, and colors and materials used in signs
- Street furniture, such as benches, trash receptacles, and publication vending boxes

Some aspects of signage, setbacks, fencing, and buffering are currently controlled through the City's zoning ordinance. The City has been successful in attracting new developments with high-quality design in recent years. The City has also retained and enhanced its extensive tree cover over the years through an ongoing tree maintenance and preservation program, described more fully in the Conservation element. In addition, the City has made an ongoing commitment to pedestrian and bicycle access by developing a bike path in the Wabash Avenue corridor.

Although the City has attracted developments with high-quality design, the provisions in the ordinance are insufficient to ensure that future development and redevelopment projects meet high standards. The ordinance does not control shade tree and landscaping requirements; lighting; building, fence, and sign colors and materials; and street furniture. Also, the City's setback requirements for commercial uses are inconsistent, with 35-foot front setbacks required in the IB zone while 40-foot setbacks are required in the PC and PD zones. Moreover, the 35-foot setback requirement is unrealistic for the LB zone, which includes many small, already developed properties.

Existing Design Standards

Linwood's most extensive written community design standards for new developments pertain to signage. For all commercial and residential developments, the City regulates the size and number of signs. Billboards and roof signs are prohibited. In addition, flashing or animated signs and lighted signs in windows are prohibited. The City imposes further regulations on commercial complexes, restricting the number, size, and location of signs by type, and requiring that signs be "harmonious and compatible with the complex and the surrounding area." Internally lit signs are not permitted in complexes.

The City's ordinance has also imposed regulations on the height and location of fences, and the ordinance requires landscaped buffer zones between residential and nonresidential zones.

Beyond the sign, fence, and buffer requirements, the land use ordinance does not regulate sign materials and colors, building design, landscaping, lighting, sidewalks, and street furniture.

RECOMMENDATIONS

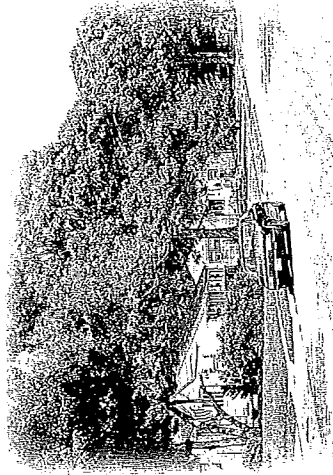
Dwelling A and B Zones

The City should consider undertaking a comprehensive rezoning to reconcile the established pattern of lot sizes with zoning. Currently, many lots in the B zone are smaller in area than what is permitted in the zone. At the same time, the A zone includes some areas with lots that are sized in accordance with B zone standards or greater.

The new zoning boundaries should be drawn to make the zones more consistent, prohibit unwanted subdivisions on larger lots and reduce or minimize the number of variances required for the construction, renovation or expansion of single-family homes. In general, zones with larger lots should have larger front setback requirements. A "grandfathering" clause should be instituted to stipulate that construction and expansion of single family residences is permitted on lots that do not currently meet the area requirements. The recommended boundaries are shown on the accompanying Future Land Use Map.

Two areas should be added to the Dwelling A zone: the portion of the Krumm Farm property off Central Avenue that is currently zoned PR, and an area between Shore Road and Wabash Avenue that is currently zoned Dwelling C. These changes are shown on the attached Future Land Use Map.

It is also recommended that a maximum height be specified in each residential zone and that the side yard setbacks be calculated as a percentage of lot. Specifically, in the Dwelling A zone the total side yard should be no less



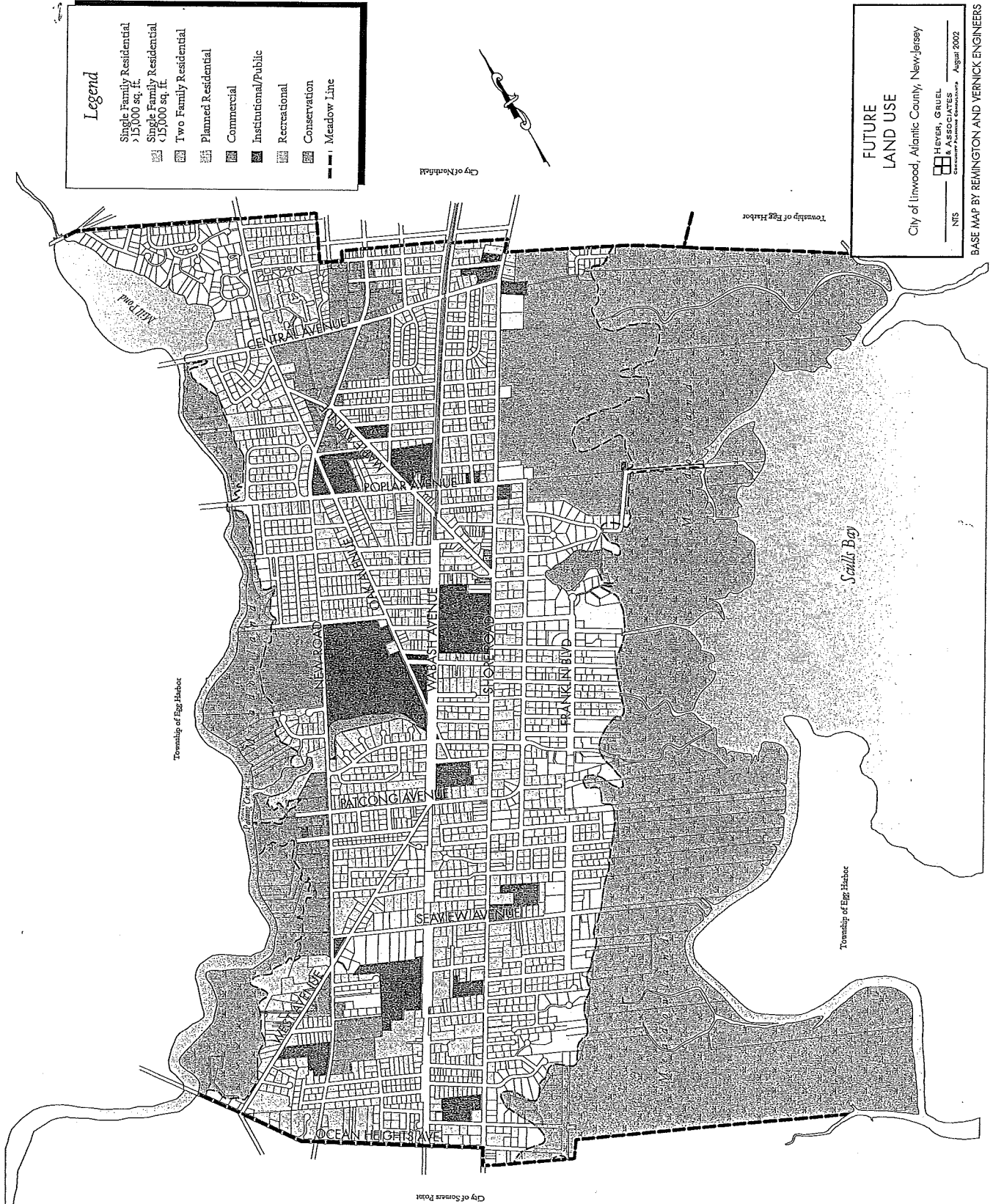
than 25% of lot width with a minimum side yard of 10 feet. In the Dwelling B zone, the minimum total side yard setback should be 35 % of lot width with a minimum yard of 20 feet.

Dwelling C Zone

Regulations for the C zone, which permits two-family homes, should be rewritten establishing clear standards regarding lot size, setbacks, and design standards. Also, several areas currently zoned Dwelling C should be rezoned to Dwelling A as shown on the accompanying Future Land Use Map. The areas currently zoned PD on Marvin, Warren, and Central avenues should be added to the Dwelling C zone.

Planned Development Zone

The Planned Development (PD) zoning classification should be eliminated. The existing PD parcels should be rezoned to Planned Commercial, Dwelling C, and/or the proposed Professional Office zone.



Legend

- Single Family Residential >15,000 sq. ft.
- Single Family Residential <15,000 sq. ft.
- Two Family Residential
- Planned Residential
- Commercial
- Institutional/Public
- Recreational
- Conservation
- Meadow Line

FUTURE LAND USE

City of Inwood, Atlantic County, New Jersey

HEYER, GRUEL & ASSOCIATES
COMMUNITY PLANNING CONSULTANTS

NIS August 2002

BASE MAP BY REMINGTON AND VERNICK ENGINEERS

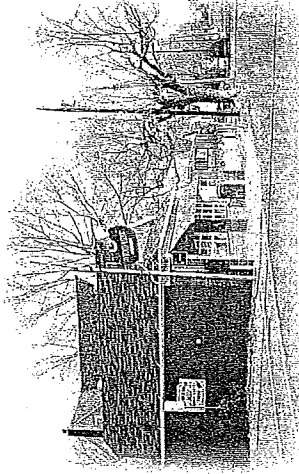
Professional Office Zone

The City should create a Professional Office (PO) zone for sections of the New Road frontage. The intent of the zone is to encourage the continuation of existing high quality office developments and the retrofitting of older commercial properties as well-designed office developments. Banks would be included as an office use permitted in the PO zone. The existing PC and PD zones on New Road that contain office development should be included in the PO zoning classification. The City should also consider including nursing homes in the PO zone as a conditional use. The Linwood Convalescent Center should be included in the PO zone to ensure that, if its operations ever cease, the property would be used for office development or a nursing home.

The City should also consider rezoning a portion of the Poplar Avenue school site to Professional Office in order to facilitate small-scale office development on this site.

Neighborhood Business Zone

The City should consider creating a Neighborhood Business (NB) zone for the intersection of Shore Road, Edgewood Avenue, and Maple Avenue. The permitted uses and setback requirements of the Limited Business zone are inconsistent with the small-scale, streetside, pedestrian-oriented character of this location. The NB zone would permit retail, personal care, and office uses, and would include square footage, height, and setback restrictions consistent with the existing one-story buildings in this area. The NB zone regulations could also include street tree planting requirements and other design standards.

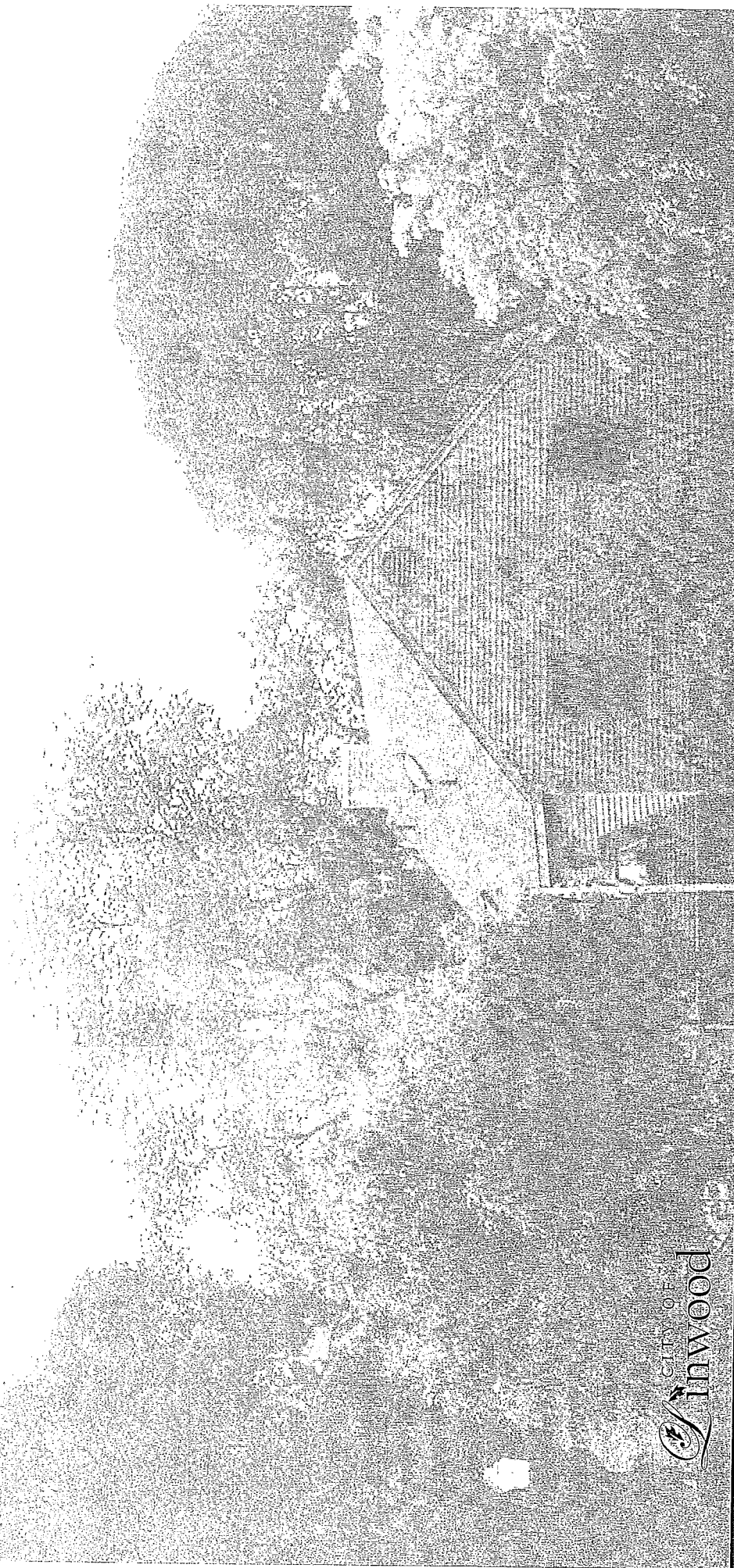


Community Design Standards

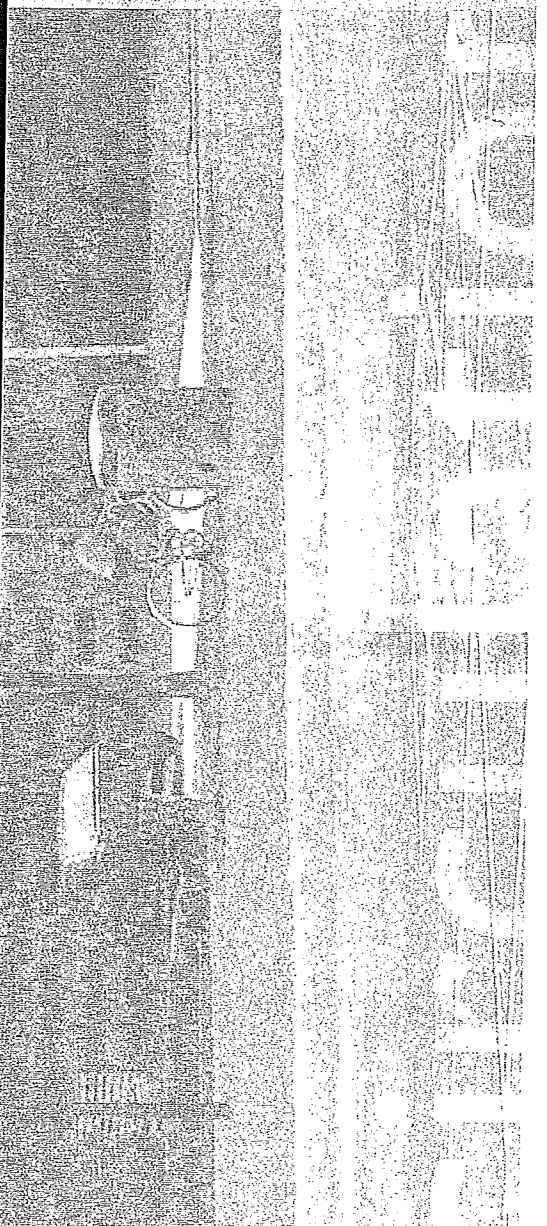
The City should adopt a set of community design standards within the zoning ordinance to address the following elements. These standards should apply to all nonresidential and multifamily residential developments in the Professional Office, Limited Business, Planned Commercial Development, Planned Residential Development, and Dwelling C zones:

- o Shade tree and landscaping requirements.
- o Front, side, and rear yard setbacks.
- o Minimum and maximum outdoor lighting standards.
- o Sign materials, colors, and lighting.
- o Building and fencing materials and colors.
- o Sidewalk locations, widths, and materials.
- o Design standards for street furniture, including benches, publication vending boxes, lights, and trash receptacles.

In addition, as mentioned above, special design regulations should be developed for the proposed Neighborhood Business zone.



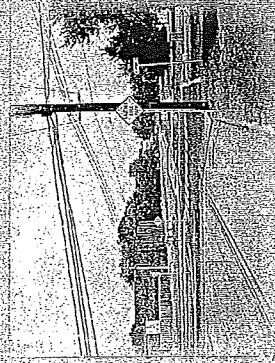
CIRCULATION



INTRODUCTION

Linwood's transportation system should recognize the character of the City of Linwood as an established, well-maintained residential community with a supporting commercial base that serves residents and provides an employment base. Regional growth is putting pressure on Linwood's transportation system as increased traffic uses local roads. The transportation system must balance the needs of increased regional traffic with the need to protect the character of Linwood as a quiet residential community

The transportation facilities in the City of Linwood are a function of the regional transportation and circulation systems. The City has two primary arteries that also serve as regional transportation corridors: Shore Road and New Road, also known as U.S. Route 9. Both are served with NJ TRANSIT bus service. Shore Road is a lower-speed highway that passes through Linwood's historic district. New Road carries more regional traffic; services Linwood's modern, auto-oriented commercial district, and also serves many of the City's newer housing developments. The Garden State Parkway is the nearest freeway to the City. Access to this route is provided by interchanges in Northfield and Somers Point. Interstate bus and rail service are offered in Atlantic City. The nearby Atlantic City International Airport provides regional air service.



INVENTORY AND ANALYSIS

Each street in Linwood can be classified according to the function it performs. Once classified, roads can be analyzed to determine whether they are fulfilling their intended purposes, and recommendations can be made for each level of classification.

PRIMARY ARTERIALS

Primary arterial streets serve as feeder roads to the regional transportation system and often provide access to higher level roads such as freeways.

Primary arterial roads usually have four or more traffic lanes and a limited number of curb cuts to facilitate the efficient movement of traffic. They are intended to carry more than 10,000 vehicles per day. In suburban settings, they often have wide rights-of-way and building setbacks and serve large commercial and residential developments. In New Jersey, they are often maintained by the State. New Road is the only primary arterial road in Linwood. It provides access to Linwood's major commercial developments, and it also provides access to Garden State Parkway interchanges located in Northfield and Somers Point.

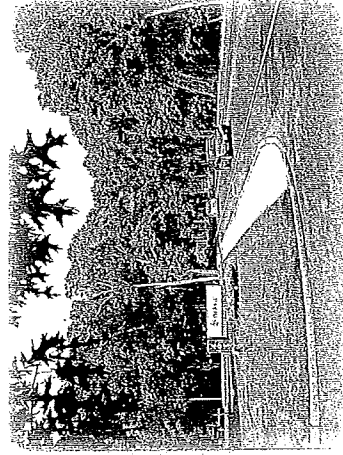
SECONDARY ARTERIALS

Secondary arterial streets connect lower-level streets with primary arterial roads and freeways. They also act as alternate routes for primary arterial roads. They usually have fewer than four lanes, and they are designed to serve smaller commercial and residential districts. They also usually have lower speed limits than primary arterials, and they often serve more residential land uses and have narrower rights-of-way and shallower building setbacks. They are typically maintained by counties and carry 3,000 to 10,000 vehicles per day. Shore Road, a lower-speed highway that serves as an alternate route to New Road, is a

secondary arterial street. The section of Ocean Heights Avenue north of West Avenue is also classified as a secondary arterial. Both are county-maintained facilities.

COLLECTOR STREETS

Collector streets provide access between local streets and primary and secondary arterial roads. Collector streets are usually maintained by municipalities, though some are under county maintenance. Often serving residential areas, collector streets have low speed limits and provide direct access to many abutting properties. They typically carry 1,500 to 3,000 vehicles per day. Nine collector streets in Linwood are maintained by the City: West Avenue, Seaview Avenue, Patcong Avenue, Oak Avenue, Poplar Avenue, Maple Avenue, Central Avenue, and Wabash Avenue between Oak and Patcong avenues. Ocean Heights Avenue south of West Avenue is a collector street under County maintenance.



LOCAL STREETS

The rest of Linwood's streets are classified as local streets. These are typically shorter in length than the other classifications and usually provide access to individual residential properties. They carry low levels of traffic, have very low speed limits, and are often narrower than collector streets. They can have shallower setbacks and narrower rights of way than the other classifications because there is less need to separate buildings from traffic. Local streets are almost always maintained by municipalities. In single-family residential areas, local streets serve 150 lots or less and carry 500 to 1,000 vehicles per day.

ROADWAY IMPROVEMENTS

County and Regional Projects
No transportation projects by NJDOT or Atlantic County are contemplated in Linwood in the immediate future. The Atlantic County Master Plan calls for the creation of a new interchange at the Garden State Parkway and Ocean Heights Avenue in Egg Harbor Township, which would likely necessitate a change in the functional classification of this street to Primary Arterial. Mitigation measures may need to be taken on adjacent residential streets to reduce the impact of cut-through traffic using this route. The City of Linwood supports the addition of an interchange at Ocean Heights Avenue.

MUNICIPAL PROJECTS

The City recently closed West Avenue at Ocean Heights Avenue to limit cut-through traffic. In addition, several street improvement projects are in various stages of proposal or completion. The City is reconstructing three streets:

- West Avenue between New Road and Wabash Avenue
- Kingsbrook Court
- Ross Lane

In addition, the City is working with Linwood Schools to improve safety and reduce congestion in the student drop-off area at Seaview Avenue School. Improvements under consideration include an expansion of the parking area and a relocation of the bike path to create additional room for student pickup and drop-off.

An additional street closure is being considered at West Avenue and New Road. To prevent traffic from turning onto West Avenue at high speeds, this intersection may also be closed to traffic turning from New Road.

BICYCLE AND PEDESTRIAN

Linwood has a highly developed bicycle path located in a former railroad right-of-way in the Wabash Avenue corridor. The centrally located path provides access to all three of Linwood's public schools, as well as All Wars Memorial Park, Hartshorn Park, and the South Jersey Industries property, which is being acquired as additional park space. The City will receive a state grant to reconstruct a portion of the path in the southern part of the City. The path, which was constructed on an old railroad bed, needs to be stabilized.



Many of Linwood's streets lack sidewalks, including some heavily trafficked streets. Shore Road has sidewalks on both sides of the street, but much of New Road lacks sidewalks. Most residential streets also do not have sidewalks. The City has been adding sidewalks as it receives state grants for sidewalk construction. The statewide Residential Site Improvement Standards require that sidewalks be constructed in most new residential developments. Also, sidewalks have been added to some sections of New Road in conjunction with new commercial developments.

MASS TRANSPORTATION

Local Service

Linwood is served by two NJ TRANSIT bus routes, both running between Atlantic City and Ocean City. Route 507 travels the length of Shore Road and provides relatively frequent service during rush hour, with 20-minute headways between buses. Route 509 uses New Road and provides service at 1-hour frequencies. Table 2 shows the bus routes with frequency of service. The bus routes are primarily used by residents of surrounding communities to commute to work in Linwood. The City of Linwood and NJ TRANSIT each conducted studies of the bus routes in recent years. Both studies found that no changes to the routes were needed.

TABLE 2: BUS ROUTES SERVING LINWOOD

Route	Points served	Route	Peak period frequency	Midday frequency	Evening frequency
507	Atlantic City, Somers Point, Ocean City	Shore Road	20 minutes	45 minutes	60 minutes
509	Pleasantville, Atlantic City, Somers Point, Ocean City	New Road	60 minutes	60 minutes	60 minutes

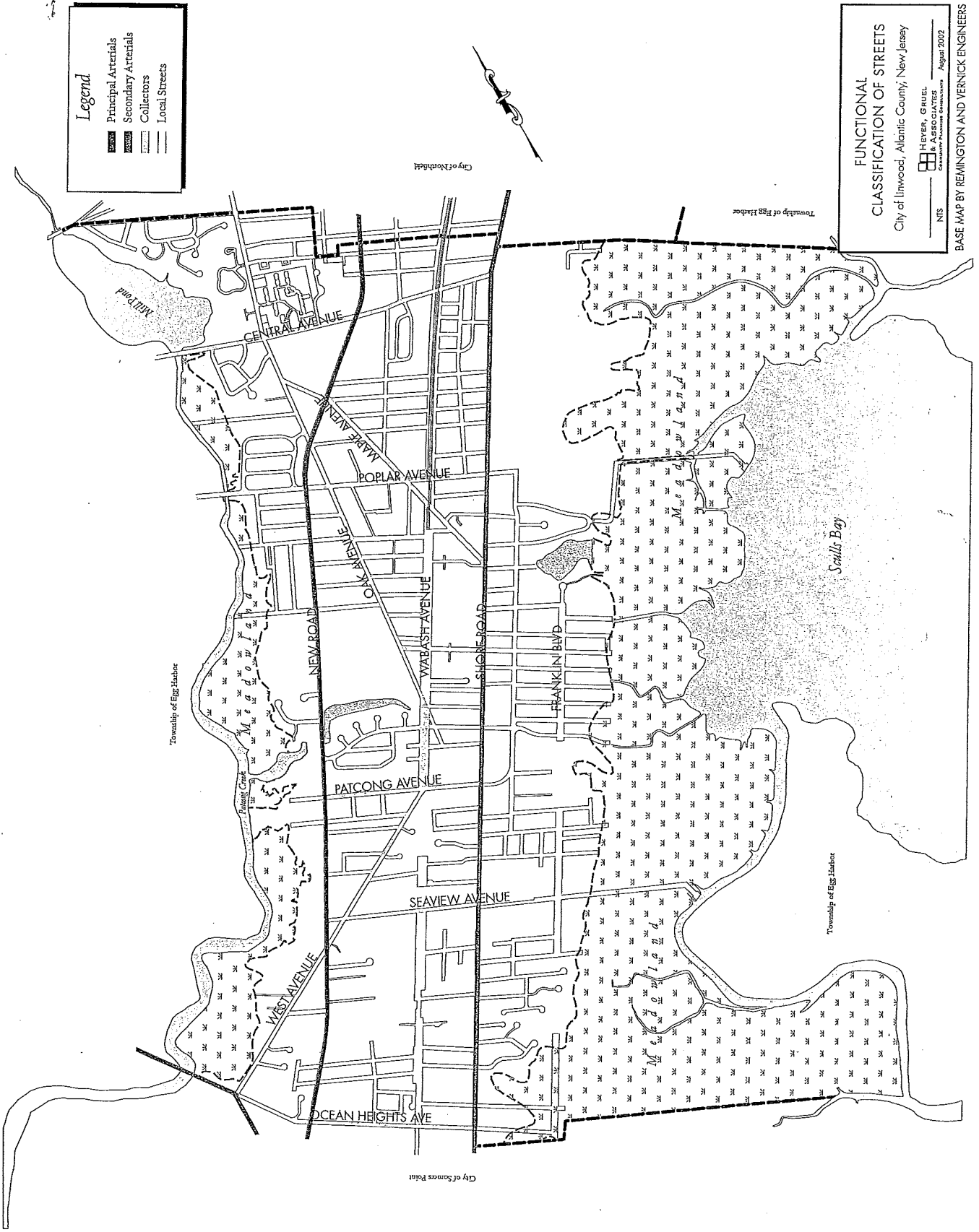
Sources: New Jersey Transit

AIR TRAVEL

The Atlantic County International Airport, 8 miles distant, is served by regional carriers such as Spirit Airlines, US Airways Express, Pan Am Clipper Connection, and Delta Connection. The nearest major hub airport is the Philadelphia International Airport, located 63 miles distant.

INTERSTATE SERVICE

The local bus routes provide the City of Linwood with access to regional transportation hubs in Atlantic City, where bus service to New York City and rail service to Philadelphia are available. NJ TRANSIT's Atlantic City Line provides service from Atlantic City to Philadelphia, where SEPTA and Amtrak connections can be made to major cities on the Northeast Corridor as well as the Philadelphia and Newark international airports.



Legend

- Principal Arterials
- Secondary Arterials
- Collectors
- Local Streets

FUNCTIONAL CLASSIFICATION OF STREETS
 City of Inwood, Atlantic County, New Jersey

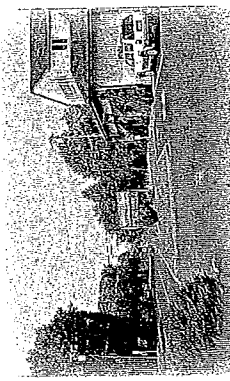
HEYER, GRUEL & ASSOCIATES
 COMMUNITY PLANNING CONSULTANTS
 August 2002

BASE MAP BY REMINGTON AND VERNICK ENGINEERS

RECOMMENDATIONS AND IMPLEMENTATION

- The impact of increased regional traffic on Linwood's streets is the most important issue facing the City's circulation system. The City recently closed West Avenue at Ocean Heights Avenue to limit cut-through traffic. Additional mitigation measures may be needed on residential streets in the southern section of the City if a Garden State Parkway interchange is constructed at Ocean Heights Avenue in Egg Harbor Township.
- A study should be undertaken to determine what measures should be undertaken to improve safety and reduce congestion at street intersections along New Road and Shore Road. Specific intersections at which additional traffic control or calming measures may be needed include West Avenue and New Road, Central Avenue and Shore Road, and Poplar Avenue and Shore Road. In addition, there are problems with traffic congestion and safety at most of the intersections with streets intersecting New Road from the south. Traffic control measures such as warning lights, traffic signals, and additional street closings may be warranted in these areas.
- West Avenue should be reclassified as a Local Street between Ocean Heights Avenue and Seaview Avenue. The closure of West Avenue at Ocean Heights Avenue as well as potential closures or other traffic calming measures at the intersection of West Road and New Road intersection make the Collector Street classification inappropriate for this stretch of West Avenue.
- As commercial properties on New Road are redeveloped, the City should ensure that access points to the roadway are minimized. When possible, vehicular access should occur at centralized intersections. Individual curb cuts should be discouraged.

- Pedestrian and bicycle improvements should be planned in coordination with the City's open space conservation efforts and should also serve the City's school facilities. The City is in the process of acquiring the South Jersey Industries property for use as a park. This facility should be served by sidewalks or pedestrian paths connecting them to surrounding residential areas.
- The City should continue to add sidewalks in areas with high traffic and narrow roadways as funding becomes available. The City should require that sidewalks be added to New Road as commercial properties are redeveloped. Curbs should be added where feasible and where not disallowed by deed restrictions.
- The 2001 Master Plan Reexamination Report recommends a bike path extension to new residential developments located west of New Road. The City should consider extending the bike path west through the Mainland Regional High School property to connect with a new traffic light which will be installed on New Road at the Prudential site. The City should also consider an extension along Poplar Avenue to connect the existing bike path to City Hall, the residential developments adjacent to Mill Pond, and the Poplar Avenue bridge into Egg Harbor Township.



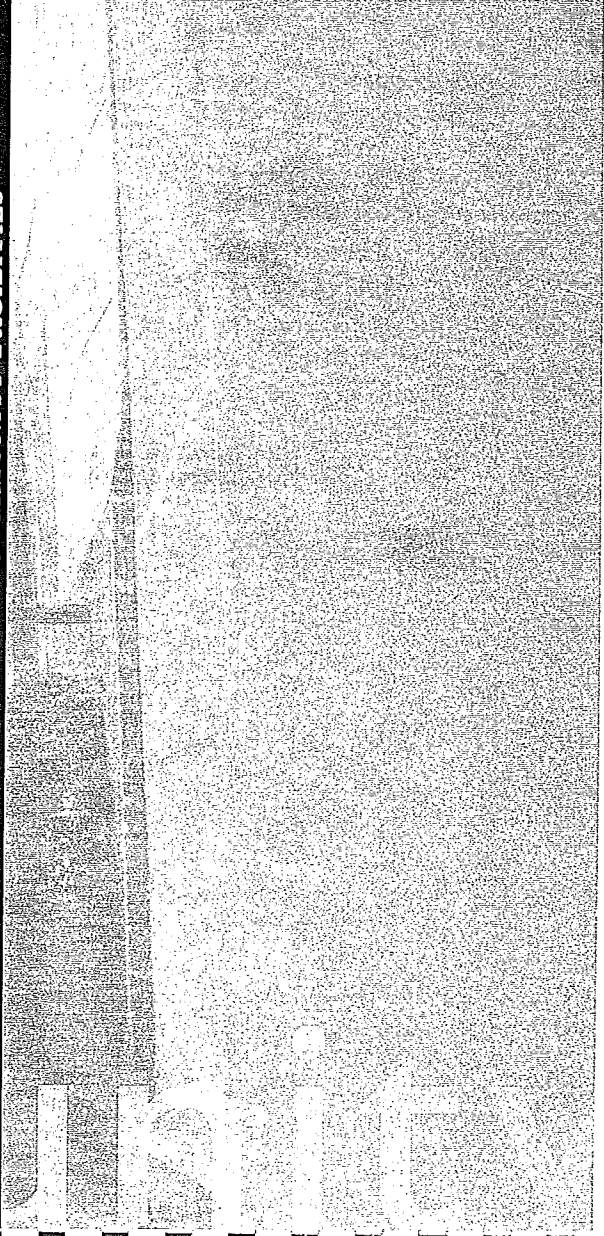


Community Facilities

COMMUNITY FACILITIES

INTRODUCTION

Community facilities, which include schools and municipal and emergency services, are critical to the quality of life of any community. The City of Linwood provides a high level of municipal and emergency services for residents. The City also has two school districts that provide elementary and secondary educational facilities. Grades K-8 are provided by Linwood Public Schools, which operates one elementary and one middle school in the City. Grades 9-12 are provided by Mainland Regional High School, which is located near the center of Linwood.



MUNICIPAL AND EMERGENCY SERVICES

Administration

All administrative offices are located in Linwood City Hall, which is located at 400 Poplar Avenue, the northeast corner of Poplar Avenue and New Road. The original one-story structure dates from 1965. The portion of this structure used for administrative offices is being demolished in summer 2002 and will be replaced by a new, larger City Hall building, with a projected completion date of fall 2003. The new one-story City Hall will include additional office and storage space in the basement and the main floor for a total of 10,188 square feet, as compared to 9,000 square feet in the old building. In the interim, City Hall is operating from rented office space in the Linwood Professional Plaza on New Road. The existing police headquarters, which is attached to the City Hall building, will remain.

Police

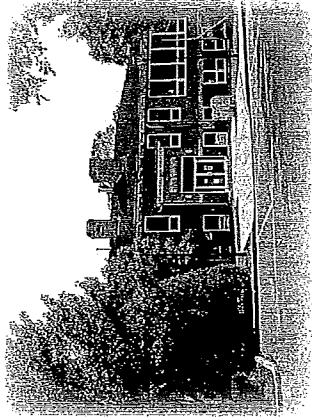
The Linwood Police Department is located in a wing of the existing City Hall building at 400 Poplar Avenue. The portion of the building occupied by the police, which was constructed in 1990, will be retained and will continue to be used for police functions, though it will receive a new roof. Also, a shed adjacent to the police building will be expanded. The Department has approximately 25 full- and part-time employees including the chief, captain, lieutenant, sergeants, patrolmen, detectives, and dispatchers. The department also employs 14 crossing guards during the school year.

Public Works

The City also maintains a Public Works facility located at 550 West Patcong Avenue. Facilities on the Public Works property include the main public works building with garages for City-owned vehicles and a superintendent's office. A 40' x 40' storage building was also recently constructed on this site.

Library

The Linwood Public Library is located at 301 Davis Avenue, between Wabash and Maple avenues, in a building converted from a public school in 1987. The library is open six days per week, has a collection of books and videos, and provides computers with Internet access. The basement space of the library is currently being improved to include a children's section and meeting rooms. The existing James Kirk Maritime Museum, operated by the Linwood Historical Society, will remain in the basement.

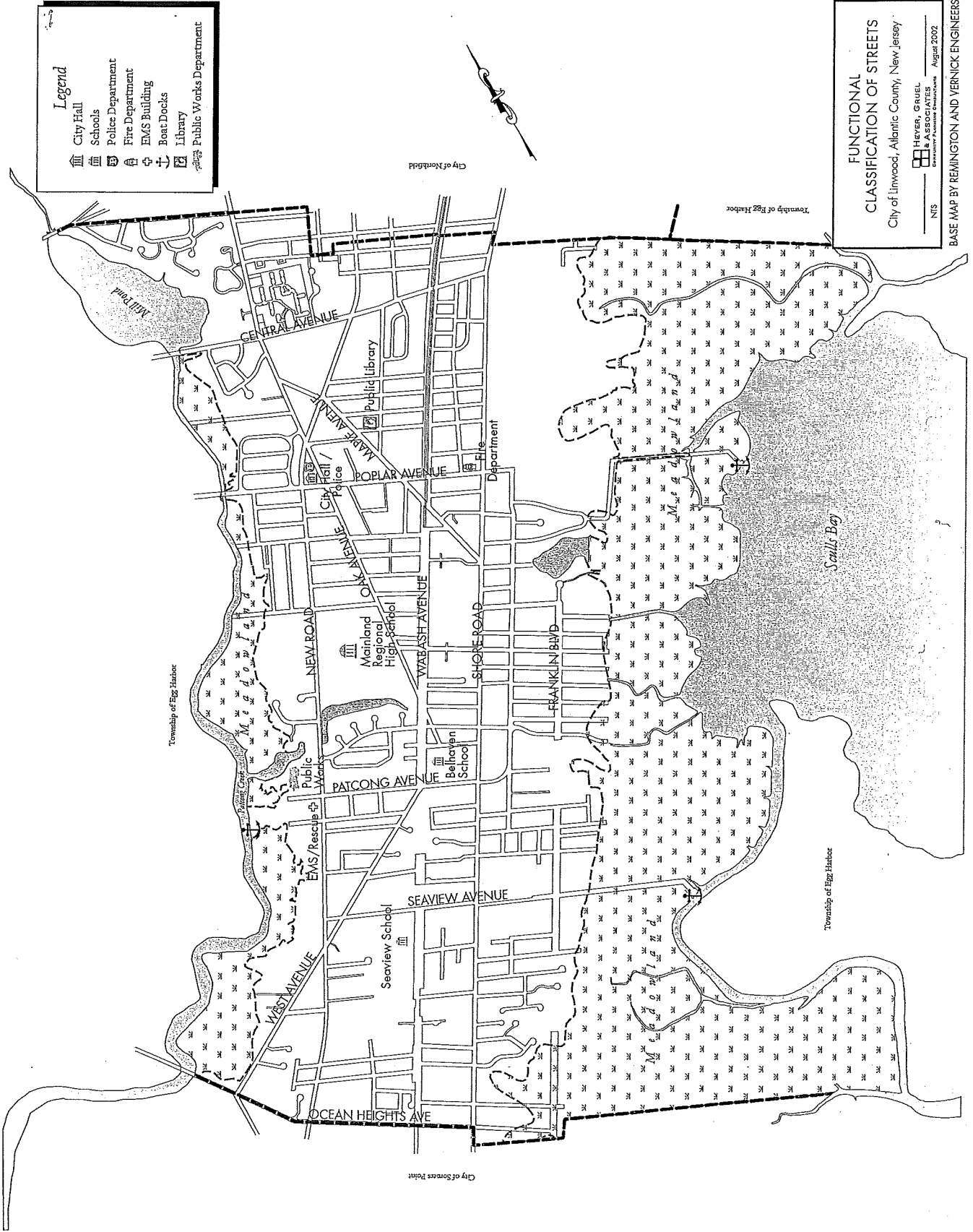


Fire and Emergency Services

Linwood has one fire station, located at Poplar and Lincoln avenues between Wabash Avenue and Shore Road. The City has four paid firefighters that assist the approximately 40 volunteer members. The fire department has four pumpers, one rescue truck, and one chief's car.

Emergency rescue services are provided by Monmouth Ocean Hospital Services Corporation (MONOC). The City owns an EMS facility located at 515 West Patcong Avenue, which is staffed full-time by MONOC employees.

The nearest hospital is Shore Memorial Hospital in Somers Point, approximately 4 miles from Linwood. The hospital has 302 beds and offers emergency services as well as 35 medical and surgical specialties. Linwood is also served by the Atlantic City Medical Center, which has two locations with a total of 581 beds in Atlantic City and Galloway Township, each located .11 miles from Linwood. The Atlantic City location has a Level II trauma center.



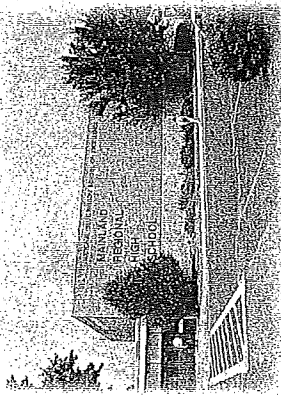
Legend

- City Hall
- Schools
- Police Department
- Fire Department
- EMS Building
- Boat Docks
- Library
- Public Works Department

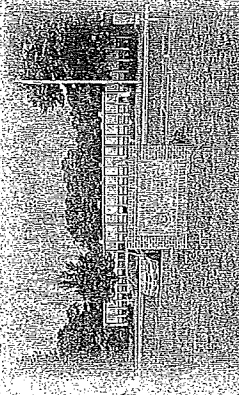
FUNCTIONAL CLASSIFICATION OF STREETS
 City of Inwood, Atlantic County, New Jersey

Heyer, Gruel & Associates
 NTS
 August 2002

BASE MAP BY REMINGTON AND VERNICK ENGINEERS



The City of Linwood is served by two school districts operating three schools. Mainland Regional operates the high school, and Linwood Public Schools operates one elementary and one middle school.



SCHOOLS

The City of Linwood is served by two school districts operating three schools. Mainland Regional operates the high school, and Linwood Public Schools operates one elementary and one middle school. Linwood Public Schools also owns the vacant Poplar Avenue School, located just east of City Hall. This building recently housed the Charter Tech High School for the Performing Arts but is currently being used by the City as temporary storage space while the new City Hall is under construction. In the future, the district may renovate the building for use as its central offices. Charter Tech has moved to a new location on New Road in Somers Point. The Linwood Public School district has 1,014 students in grades K-8. The Mainland Regional High School district has 1,498 students in grades 9-12; however, many of these students are drawn from Somers Point and Northfield, which the high school also serves. According to projections by Atlantic Cape Community College, the student

population coming from the City of Linwood is expected to grow moderately through 2003, the latest year for which projections are available. However, Northfield's student population is expanding at a more rapid pace, as is the student population at Mainland Regional High School, partly as a result of growth in Northfield. Linwood Public Schools does not have a completed capital plan. The only expansion project listed in Mainland Regional High School's capital plan is the construction of an athletic equipment storage facility.

TABLES

Table 3: Linwood and Mainland Regional Districts Overview

School	Grades	Number of Teachers	Number of Support Staff	Recreation Facilities
Seaview	K-4	37	21	N/A
Belhaven	5-8	33	17	N/A
Mainland Regional	9-12	118	82	Tennis courts, athletic fields, aquatic center

Table 4: Linwood, Somers Point and Northfield Enrollment Projections

District	Projected enrollment in 2003	Increase over 1999 enrollment	Percent increase
Linwood	1,071	80	8.0%
Northfield	1,202	188	18.5%
Somers Point	1,235	-12	-1.0%
Mainland Regional	1,595	279	21.2%

ELEMENTARY AND MIDDLE SCHOOLS

Current Conditions

Linwood Public Schools operates one elementary and one middle school. The K-4 grades are housed at Belhaven School, located at Wabash and Patcong avenues. Grades 5-8 are provided at Seaview School, located on Wabash Avenue south of Seaview Avenue. Both schools are located adjacent to the City's bike path. As shown in the enrollment table below, Belhaven School has experienced an increase in enrollment of 85 students over 5 years. Enrollment at Seaview has been more constant, with no change in student population from 1997-98 to 2001-02. Overall, the district population has increased by 9.1% since the 1997-98 school year.

Two years ago, Seaview School added a Preschool Inclusion Program, which enrolls developmentally disabled preschool students along with typically developing children. Seaview School has safety and congestion problems in the student pick-up and drop-off areas. These issues are being addressed in coordination with the City and a solution may involve moving a stretch of the Linwood bicycle path to create more room for student drop-off activities.

Table 5- Enrollment, Linwood Public Schools, 1997-2002

Grade	2001-02	2000-01	1999-2000	1998-99	1997-98
Pre-Kindergarten	9	9	0	0	0
Kindergarten	68	65	74	73	72
Grade 1	83	87	90	103	97
Grade 2	91	92	105	104	94
Grade 3	95	111	105	93	93
Grade 4	111	106	88	98	103
Special Education	54	54	47	44	52
Seaview School Total	511	524	509	515	511
Grade 5	114	96	101	110	102
Grade 6	98	104	107	106	88
Grade 7	106	104	98	93	96
Grade 8	112	112	95	91	84
Special Education	73	67	66	50	48
Belhaven School Total	503	483	477	450	418
Total Enrollment	1,014	1,007	986	965	929

HIGH SCHOOLS

Current Conditions

Linwood is part of a regional high school district that operates one high school, Mainland Regional, located between New and Oak avenues near Monroe Avenue. The high school draws its student population from three communities: Linwood, Somers Point, and Northfield.

The high school is also located near the City's bike path. Enrollment at the high school has been increasing rapidly in recent years, with an increase of 362 students since the 1997-98 school year. These figures represent a growth rate of 31.9% since 1997-98. This growth rate is 22 percentage points higher than the enrollment growth rate in the Linwood Public Schools, suggesting that much of the growth in high school enrollment is resulting from student population increases in Northfield and/or Somers Point.

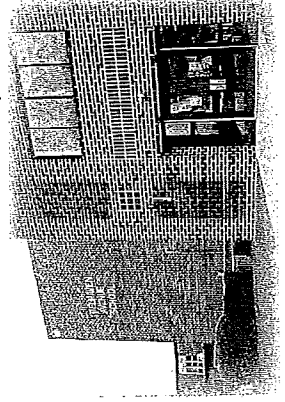
As a result of a successful bond referendum in 1999, the high school added 14 classrooms in 2000. The bond issue also enabled the school to expand its computer facilities and Internet access. There is a need at the high school for additional classroom space and also for additional recreation space. The following table shows enrollment trends since 1997-98 at Mainland Regional High School.

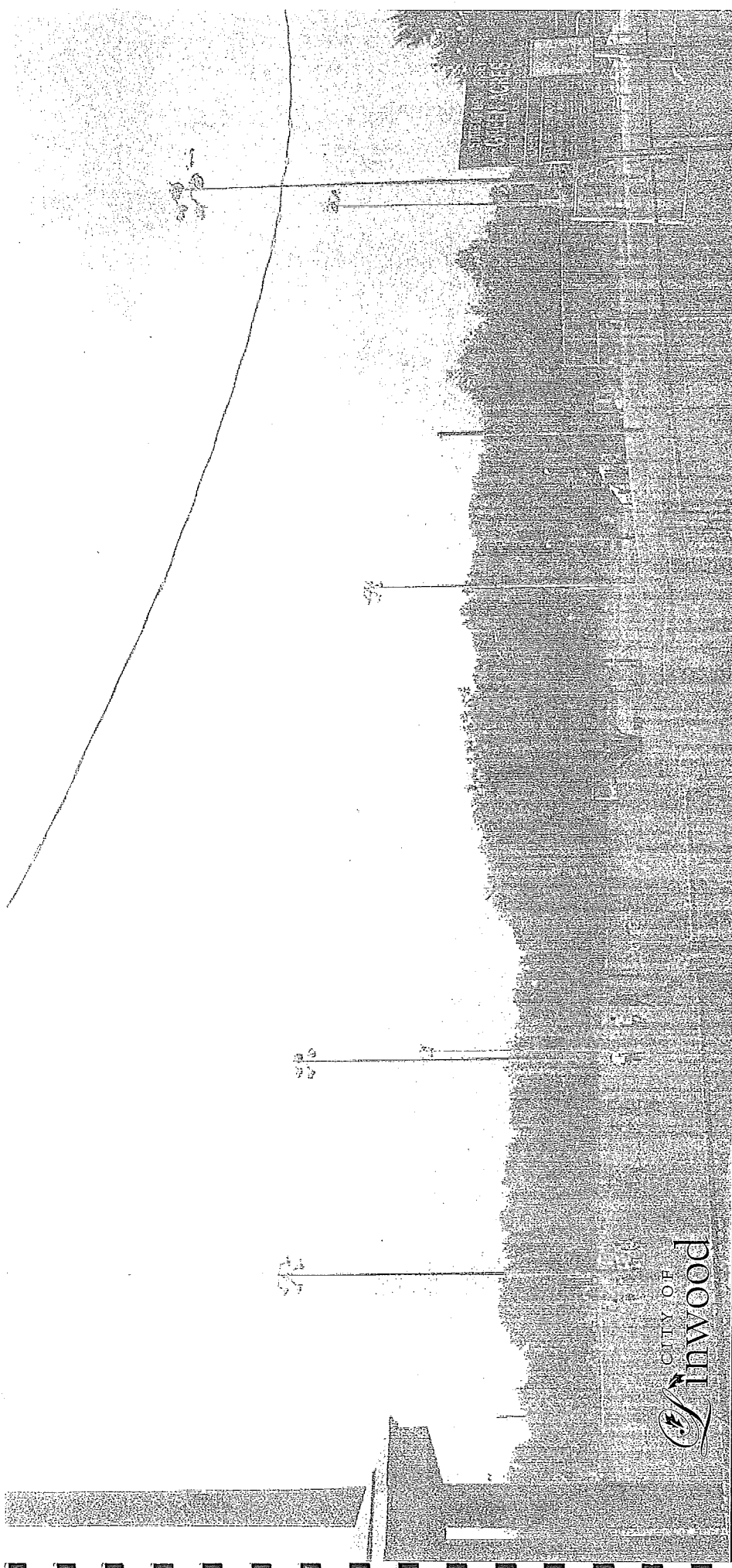
Table 6: Enrollment, Mainland Regional High School, 1997-2002

Grade	2001-02	2000-01	1999-2000	1998-99	1997-98
Grade 9	435	406	407	369	342
Grade 10	388	383	320	309	304
Grade 11	366	314	304	284	253
Grade 12	298	290	285	252	236
Special Education	10	8	7.5	0	0
Total	1,498	1,402	1,324.5	1,215	1,136

RECOMMENDATIONS

- The City should continue to provide proper maintenance and upgrades for existing facilities. The City should provide attractive landscaping and signage for all community facilities that are visible from public streets and from the bicycle path.
- The City should develop a consistent signage identity including a logo. Signage bearing the logo would be used to identify community facilities and to identify the City at its gateway entrances, such as New Road and Shore Road.
- The City, in conjunction with the schools, should continue to monitor traffic and parking conditions around the three school sites.
- The City should support the re-use of the Poplar Avenue School by Linwood Public Schools for its central offices.
- The City should prepare an inventory of municipally owned vacant parcels to determine the best use for those parcels.
- The City should continue to work closely with both Mainland Regional High School and the Linwood Public Schools to ensure that their expansion plans fit harmoniously with the City's land use, circulation, and recreation plans and conditions.





CITY OF
Inwood

PARKS AND RECREATION

INTRODUCTION

The City of Inwood is committed to providing its residents with increased open-space and recreation opportunities. The City currently operates two existing parks, an extensive bike path through the center of the community, and three boat docks on Patcong Creek and Scull's Bay. The City is completing purchases of the South Jersey Industries and Connectiv properties for new parks adjacent to the bike path in the southern section of the City. There are currently no County or State park facilities within the City.

INVENTORY

The City currently operates a park system with approximately 20 acres, in addition to a bicycle path system that includes nearly 33 acres. The City's Recreation Board operates recreation programs at these facilities in addition to those operated by a variety of other private and public organizations. As a result of increased pressure on existing facilities, particularly for youth sports, the City has been pursuing the purchase of additional parkland. There is intense pressure for additional youth sports facilities in the City and throughout Atlantic County, as identified in the Atlantic County Open Space Plan. The City is also committed to providing additional passive recreation opportunities. The following table shows existing developed park facilities in the City. These parks are also shown on the attached map.

Table 7: Existing Developed Parks

Name	Block	Lot	Acres	Facilities
All Wars Memorial Park	73	11	15.6	Playing fields, passive recreation
Hartshorn Park	13	2	3.2	Passive recreation
Crestlea Park (At Public Library)	130	1	1.8	Playground
George K. Frances Bikeway	500	8	28.9	Bike path
Bike path extension	500	9, 10	4.1	Bike path

Source: City of Linwood Recreation and Open Space Inventory

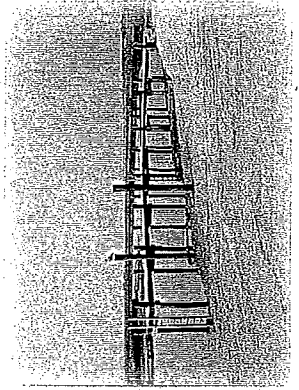
There are also recreation fields on the Poplar Avenue school site. In recognition of the need for a significant expansion in developed parkland, the City is currently in various stages of acquiring three additional park facilities. A small passive park will be located on the Connecticut property, a 0.6-acre triangle formed by the intersections of Wabash Avenue, Belhaven Avenue, and Morris Avenue. A larger park with a playground, playing fields, and benches will be located on the 5.7-acre South Jersey Industries property, located on the north side of Wabash Avenue at Cleveland Avenue. Both of these parcels are adjacent to the bike path. Both the Connecticut and South Jersey properties are currently under contract.

Table 8: Proposed Parks

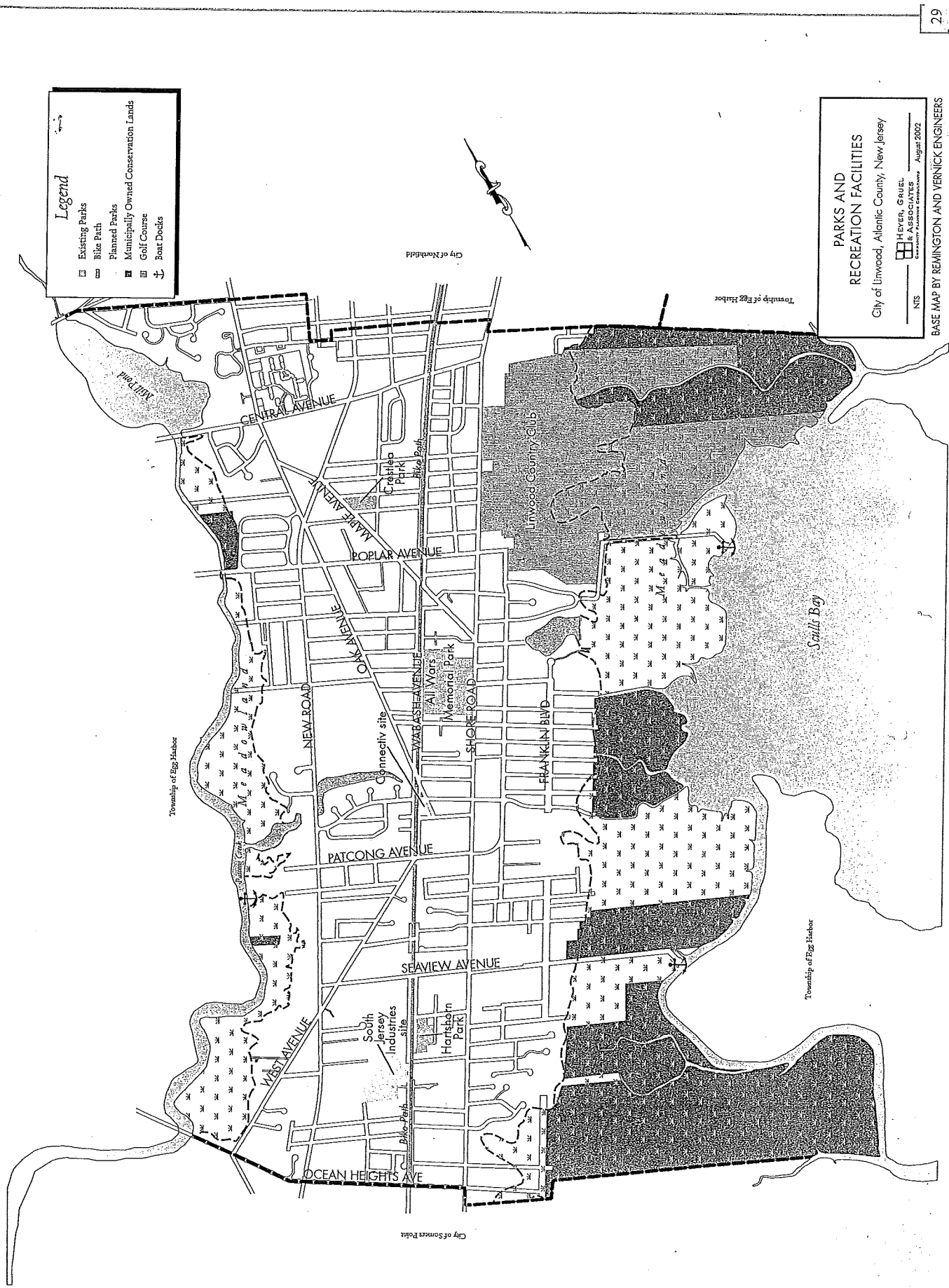
Name	Block	Lot	Acres	Facilities
Connecticut property	54	1	0.6	Passive recreation
South Jersey Industries property	6	25, 28	8.1	Playing fields, playground
Krumm farm	149	401	7.2	Playing fields, vineyard, passive recreation

BOAT DOCKS

The City operates two municipal boat docks located on Scull's Bay and one boat dock on Patcong Creek. The Bay boat docks are at Seaview Avenue and Poplar Avenue. The Creek boat dock is located at Hamilton Avenue. These facilities provide residents with access to the bodies of water that surround Linwood.



(Footnotes)
1 Bikeways and lands preserved exclusively for their conservation value are not included in calculations for the population standard.
2 For the Balanced Land Use standard, bikeways and lands preserved exclusively for their conservation value are included in the community's total.



PRIVATE RECREATIONAL

FACILITIES

One private golf course, operated by the Linwood Country Club, is located in the City. The golf course is located in the environmentally sensitive area of the City adjacent to Scull's Bay. There is also a privately operated pool and tennis club, known as MRA, located on Central Avenue.

ANALYSIS

Two measurements are typically used in New Jersey to determine the adequacy of the park system in a municipality. The application of these standards to the City of Linwood are shown in the table below. The first is a standard based on population density. Linwood's conservation lands and bike path are not included in this calculation because the population standard is not intended to measure the adequacy of these types of facilities. For each 1,000 residents, 8 acres of neighborhood and community parks, playgrounds, and play fields are considered adequate. By this standard, Linwood's total park area of 20.6 acres is deficient by approximately 36.8 acres. The City is currently taking steps to partly correct this deficiency by adding 13.5 additional acres of parks, playgrounds, and playing fields.

The second standard used to determine the adequacy of park facilities is the Balanced Land Use standard. By this standard, Linwood should set aside 3% of the community, or 73.5 acres, for parks and open space, including its bike path and conservation lands. The City's unique, fragile environmental conditions have led it to acquire approximately 430 acres of open space as

conservation land in addition to its 20.6 acres of existing developed parks and 33-acre bike path system. By the Balanced Land Use standard, the City has adequate parkland and open space. This "oversupply" of parkland and open space results from the environmentally sensitive lands that have been acquired by the City. The following table shows Linwood's park deficiencies based on the two standards.

Table 9: Population and Balanced Land Use Park Standards

Standard	Measurement	Acres Required	Total Existing Acres	Proposed Expansions	Proposed Surplus (Deficiency)
Population ¹	8 acres per 1,000 population	57.4 (based on total pop. of 7,172)	20.6	15.9 acres	(20.9 acres)
Balanced Land Use ²	3% of municipal land area	73.5 (based on total acreage of 2,450)	483.8 (19.7% of total land area)	15.9 acres	426.2 acres

Because its developed area is almost fully built out, it is doubtful that the City could acquire sufficient developed parkland to fulfill the population standard. However, the existence of the deficiency indicates a need for additional developed parks, playing fields, and playgrounds. The City should continue to pursue opportunities to increase the amount of parkland in its developed area.

RECOMMENDATIONS

The City of Linwood should continue to pursue open space and recreation opportunities for its residents. As demand for youth-oriented active recreation opportunities increases, the City will need to ensure that sufficient playing fields and related facilities are provided. At the same time, the City must preserve its existing passive recreation opportunities, expand these opportunities where possible and continue to preserve environmentally sensitive land in its undeveloped state.

The City should work with the Board of Education to explore joint construction and use of facilities such as soccer fields, basketball courts, and swimming pools. As the City expands its recreation opportunities, it should avoid providing duplicate facilities where possible.

For new developed park facilities, the City should acquire land within its existing developed area rather than using land in or adjacent to the meadowland area. Park facilities inside the existing developed area are more convenient for residents and avoid creating disturbances in the natural areas near Patcong Creek and Scull's Bay.

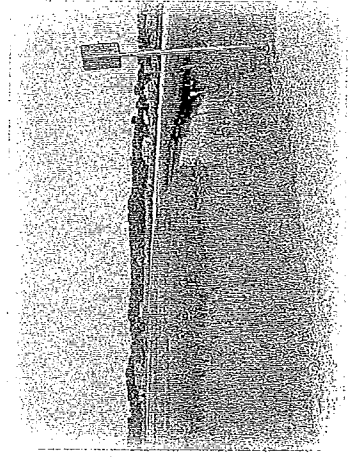
The City should strive to provide both active and passive recreation opportunities at new park facilities. The City should avoid the development of single-use parks, such as parks devoted exclusively to playing fields.

The City should continue to pursue the acquisition of parcels adjacent to the bicycle path and should consider extending the path system to provide access to newly developed parks as well as new residential developments.

The City should ensure that all parks are accessible to residents, including children and seniors. Sidewalks should be extended to all existing and new park facilities.

The City should consider enhancing the environmental value of its parks and its bike path by planting native vegetation, including trees, in these areas. These actions would help to create a "nature corridor" throughout the developed area of the City.

To promote greater accessibility to its natural areas, the City should provide pedestrian connections from the existing park system.

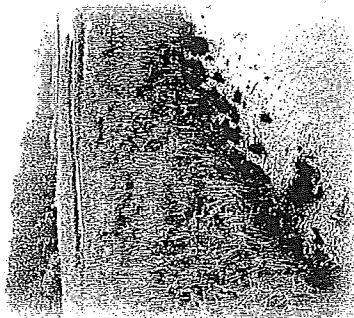




CONSERVATION

INTRODUCTION

Linwood is an existing developed residential community, but it also contains significant natural resources that must be protected as development pressure rises in the surrounding region. The meadowlands located to the east and west of the developed portion of the City in State Planning Area 5 are its most valuable environmental assets. There are also wetlands located within State Planning Area 1, the developed portion of the City.



Continuing to protect the City's remaining natural areas will yield several benefits. The Environmental Commission is currently completing a Natural Resources Inventory which will document plant and animal species, including rare species, that make their home in Linwood. Preserving the meadowlands and protecting other wetlands will help ensure the continued survival of these species. In addition, the City has important environmental features, including trees, wetlands, and open space, in its developed areas. These features should be preserved to protect habitat and preserve the quality of life for residents.

INVENTORY AND ANALYSIS

Description

The City of Linwood is located in the physiographic province known as the Atlantic Coastal Plain, which is a mostly flat area that extends throughout much of the eastern coastal region of the United States. The developed portion of the City is located on an upland area between Scull's Bay on the east and the Patcong Creek on the west. The City is located only a few miles from the Atlantic Ocean, and it has many environmental characteristics associated with coastal areas, including flat topography, sandy soils, and extensive tidal marshes. These features create habitat for coastal flora and fauna.

Coastal Regulations

The City is subject to the rules and regulations of the Coastal Area Facilities Review Act (CAFRA) and related statutes, which are enforced by the New Jersey Department of Environmental Protection. The Coastal Zone Management rules at N.J.A.C. 7-7E-5B have adopted policy goals for each Planning Area identified in the State Development and Redevelopment Plan. In the Metropolitan Planning Area (PA 1), the following goals have been adopted:

1. Guide development and redevelopment to ensure efficient use of scarce land while capitalizing on the inherent public facility and service efficiencies of concentrated development patterns;
2. Accommodate a variety of housing choices through development and redevelopment;

3. Promote economic development by encouraging redevelopment efforts such as infill, consolidation of property, and infrastructure improvements, and by supporting tourism and related activities;
4. Promote high-density development patterns in coastal urbanized areas to encourage the design and use of public transit and alternative modes of transportation to improve air quality, to improve travel among population and employment centers and transportation terminals, and to promote transportation systems that address the special seasonal demands of travel and tourism along the coast;
5. Encourage the reclamation of environmentally damaged sites and mitigate future negative impacts, particularly to waterfronts, beaches, scenic vistas, and habitats;
6. Promote public recreation opportunities in development and redevelopment projects, and ensure meaningful public access to coastal waterfront areas; and
7. Encourage the repair or replacement of existing infrastructure systems where necessary to ensure that existing and future development will cause minimal negative environmental impacts.

These policy goals indicate that continued development and redevelopment in the Metropolitan Planning Area is to be encouraged, subject to certain guidelines. For example, the coastal rules limit the amount of impervious cover allowed on development sites in the Metropolitan Planning Area, and they require that a certain percentage of vegetative cover be preserved.

By contrast, the Environmentally Sensitive Planning Area (PA 5) is to be protected from development. In PA 5, development should be encouraged only in designated Centers.

1. Protect environmentally sensitive features by guiding development into centers and maintaining low intensity development patterns elsewhere, carefully link the location, character and magnitude of development to the capacity of natural and built environments to support new growth, accommodate development at higher intensities in the Coastal Environmentally Sensitive Planning Area barrier island centers, compatible with development patterns in existing centers, and discourage the development of public infrastructure facilities outside of centers;
2. Encourage transportation systems that link centers and support the travel and tourism industry, recreational and natural resource-based activities, and address the special seasonal demands of travel and tourism to barrier islands;

3. Locate economic development opportunities in centers that serve the surrounding region and the travel and tourism industry and accommodate in other areas appropriate seasonal, recreational, and natural resource based-activities that have a minimal impact on environmental resources; and
4. Protect sensitive natural resources critical to the maintenance of coastal ecosystems by maintaining large contiguous areas of undisturbed habitat, open space and undeveloped land, maintain the balance of ecological systems and growth, and protect the areas outside of centers from the effects of development by maintaining it as open space.

The City of Linwood includes no existing or proposed Centers in PA 5. Therefore, the coastal rules call for continued preservation in the City's environmentally sensitive area. The coastal rules also define separate regulations for numerous other types of environmental areas, which impose additional screens on the development process. For example, several different types of wetlands occur in both the Environmentally Sensitive and Metropolitan planning areas in Linwood.

Existing Preservation Efforts

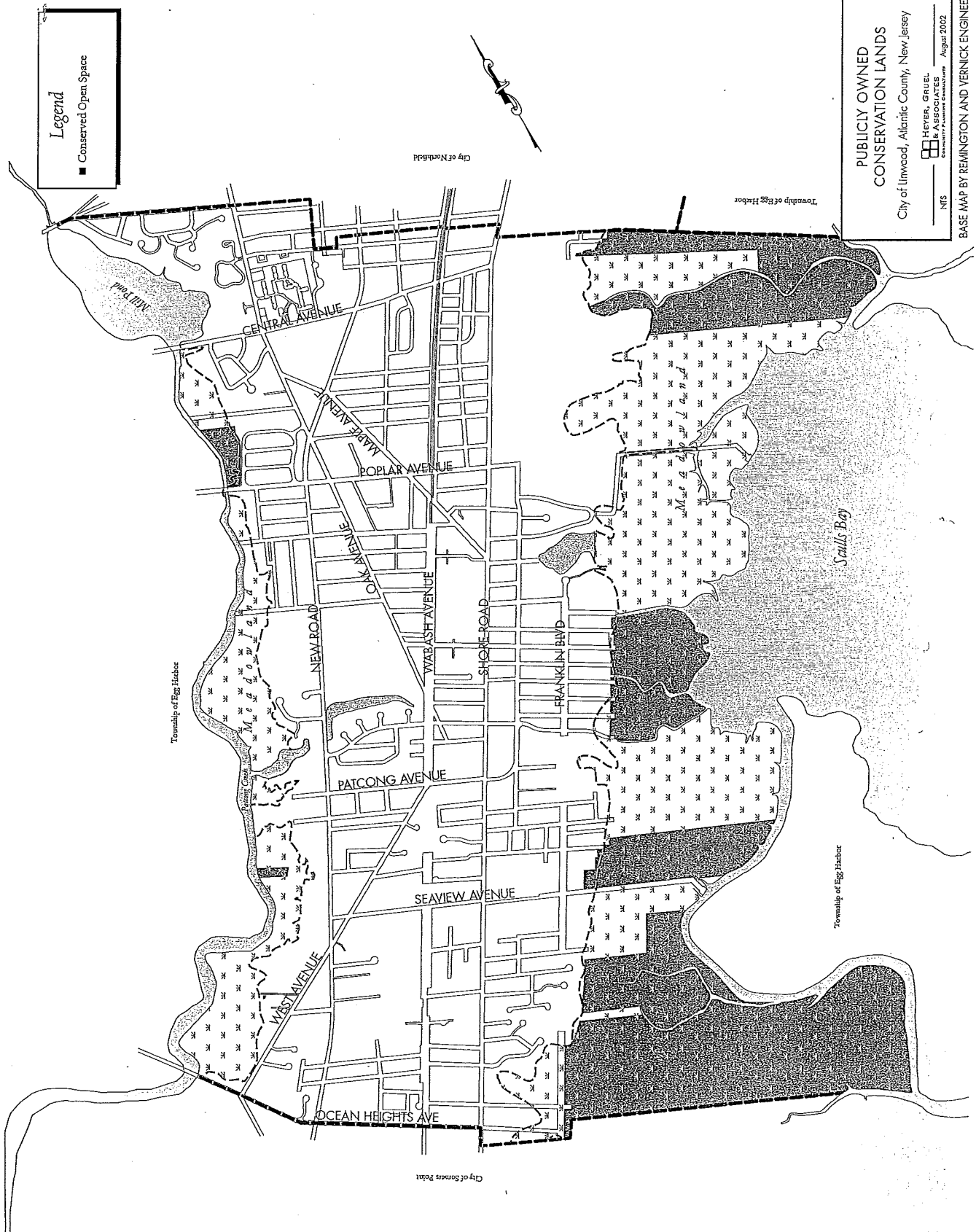
The City has implemented several measures to encourage the preservation of land in the Environmentally Sensitive area. It has implemented Conservation zoning in the entire meadowland area, which prohibits all development in the meadowlands aside from essential public utilities and municipally owned docks. The only significant development located in the meadowlands is currently the Linwood Country Club's golf course.

The City has also purchased several parcels totaling approximately 430 acres located in the meadowland area, as shown in the following table and in the attached map. Each of these tracts is at least partly located in the meadowland, though some contain some upland area as well. These parcels are wholly or almost entirely undeveloped.

Table 10: Existing Meadowlands and Uplands Held by the City of Linwood

Block	Lot	Acres	Location
1	12, 30	1.6	Creek side (southwest)
16.01	53	138.9	Bay side (southeast)
16.01	56	50.9	Bay side (southeast)
16.01	57	37.6	Bay side (southeast)
40	40, 49	39.6	Bay side (southeast)
116	1	8.8	Creek side (northwest)
179	1	22.7	Bay side (southeast)
180	1	37.6	Bay side (southeast)
184	6, 29	92.4	Bay side (northwest)

Source: City of Linwood Recreation and Open Space Inventory



Legend
 ■ Conserved Open Space

**PUBLICLY OWNED
 CONSERVATION LANDS**
 City of Inwood, Atlantic County, New Jersey
 HEYER, GRUEL & ASSOCIATES
 Community Planning Consultants August 2002
 NIS

The table and map show that most of the City's purchased open space is on the Bay side of the community. Consideration should be given to acquiring additional land on the Creek side to ensure that both ecosystems are equally protected.

In addition to its conserved land in the meadowlands, the City of Linwood contains numerous important environmental features in its developed area. These features include tree-lined streets, two municipal parks that are used for recreation, and an extensive bike path. The City is in the process of acquiring two additional park properties on the Connecticut and South Jersey Industries properties. These facilities present opportunities for preserving and enhancing the environmental qualities in the developed area of the City. Existing City-owned parks provide important open space for residents and can provide habitat for plant and animal species. The City-owned bike path presents an opportunity to create an open-space corridor extending throughout the community.

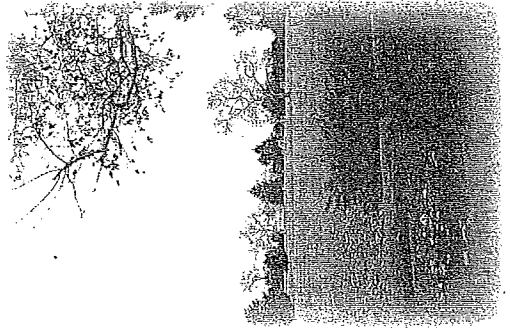
The City of Linwood has an extensive "urban forest" of street trees and other trees located on private and municipal property. The trees provide shade and wildlife habitat and identify Linwood as a distinctive residential community. The City has been designated in the National Arbor-Day Foundation's Tree City USA program for four years and recently received a \$1,500 tree planting grant.

The City also has adopted Planned Development regulations which are intended to encourage the preservation of large tracts of open space by clustering buildings on a portion of developed sites and preserving the remainder.

RECOMMENDATIONS

- The Environmental Commission is currently completing a Natural Resources Inventory. This document will provide a valuable basis for future planning efforts to conserve the meadowlands and other environmentally important areas in Linwood.
- The City should continue to pursue funding to permanently preserve additional tracts in the meadowlands, particularly on the Creek side. Potential funding sources include both Atlantic County, which has a dedicated Open Space Tax and an Open Space Trust Fund, and the State of New Jersey. The City should also consider implementing an open space property tax, which would make the City eligible for additional state Green Acres funding through the Planning Incentive Program.
- The City should consider enhancing the environmental value of its parks and its bike path by planting native vegetation, including trees, in these areas. These actions would help to create a "nature corridor" throughout the developed area of the City.
- The City should continue acquiring additional parcels near the bike path for preservation as open space, where possible. Natural areas should be retained and enhanced on these parcels.

- The City should continue its aggressive tree planting program. The City should consider adding street trees around the new City Hall to improve the appearance of the area.
- The City should review the management practices used on the Linwood Country Club golf course. The golf course should be encouraged to use Best Management Practices that limit the amount of fertilizer and pesticide that is used on this facility.
- The City should examine its land development ordinances to ensure their appropriateness with respect to street tree planting and preservation, stormwater management, and open space preservation.

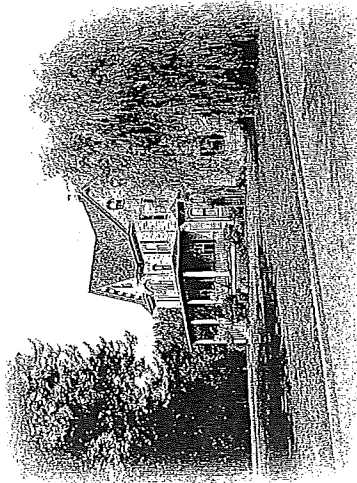




HISTORIC PRESEVERATION

OVERVIEW OF LINWOOD'S HISTORY

Linwood has a long and illustrious past as an Indian hunting ground, a center of Quaker settlement, and more recently, a center of shipbuilding, fishing, and farming. Until European conquest in the 17th century, Linwood was used as a hunting and fishing ground by Lenape Indians who came annually from northwestern New Jersey seeking shellfish. In 1695, the land that now constitutes Linwood and surrounding towns was sold to a group of Quaker families who established plantations.



The first Quaker Meeting House in the area that is now southern Atlantic County was constructed in what is now Linwood in 1730. Beginning in the late 1700s, the town that was forming near the Meeting House had become known as Leedsville. Throughout the next century, farmers, fishermen, shipbuilders, and sea captains made Leedsville their home. Shellfish were harvested from Sculls Bay, and trade was conducted by ship with ports along the east coast.

Leedsville's name was changed to Linwood in 1880 when the town established a post office; in 1889 the town was incorporated as an independent political entity. The coming of the railroads brought further changes as accessibility improved and the town became a desirable site for development. In 1881, the Pleasantville and Ocean City railroad established a line along Shore Road. Trolley service began in 1907 when an interurban line connecting Linwood to Atlantic City and Ocean City was developed. Shortly after the coming of the trolley, developers began converting Linwood's farm fields into residential subdivisions. This trend intensified as private automobile ownership increased and new highways were constructed to the area. By the end of the 20th century, Linwood was almost completely developed, with the exception of the meadowlands bordering Sculls Bay and Patcong Creek.

HISTORIC RESOURCES

Linwood has retained many pieces of its heritage. Table 11 lists historic resources in Linwood that have been documented on the National and State Registers of Historic Places. The Linwood Historic District, listed on the National Register of Historic Places, was designated in 1989 and includes many structures that provide tangible evidence of Linwood's growth and development from 1810 to 1935. The district consists mainly of residential buildings set well back from the street, with some small commercial buildings from the early 20th century and a few institutional structures. In all, 165 buildings are included, 133 of which are listed as contributing to the historical and architectural significance of the district. The district includes 19th century houses constructed in the Early Federal, Gothic Revival, and Queen Anne styles, as well as early 20th century homes built in the

Colonial Revival, Foursquare, and Bungalow styles. The Masonic Hall, a 19th century church, and Linwood Borough School #1 also contribute to the historical significance of the district. However, only the schoolhouse building is listed on the State and National Registers of Historic Places.

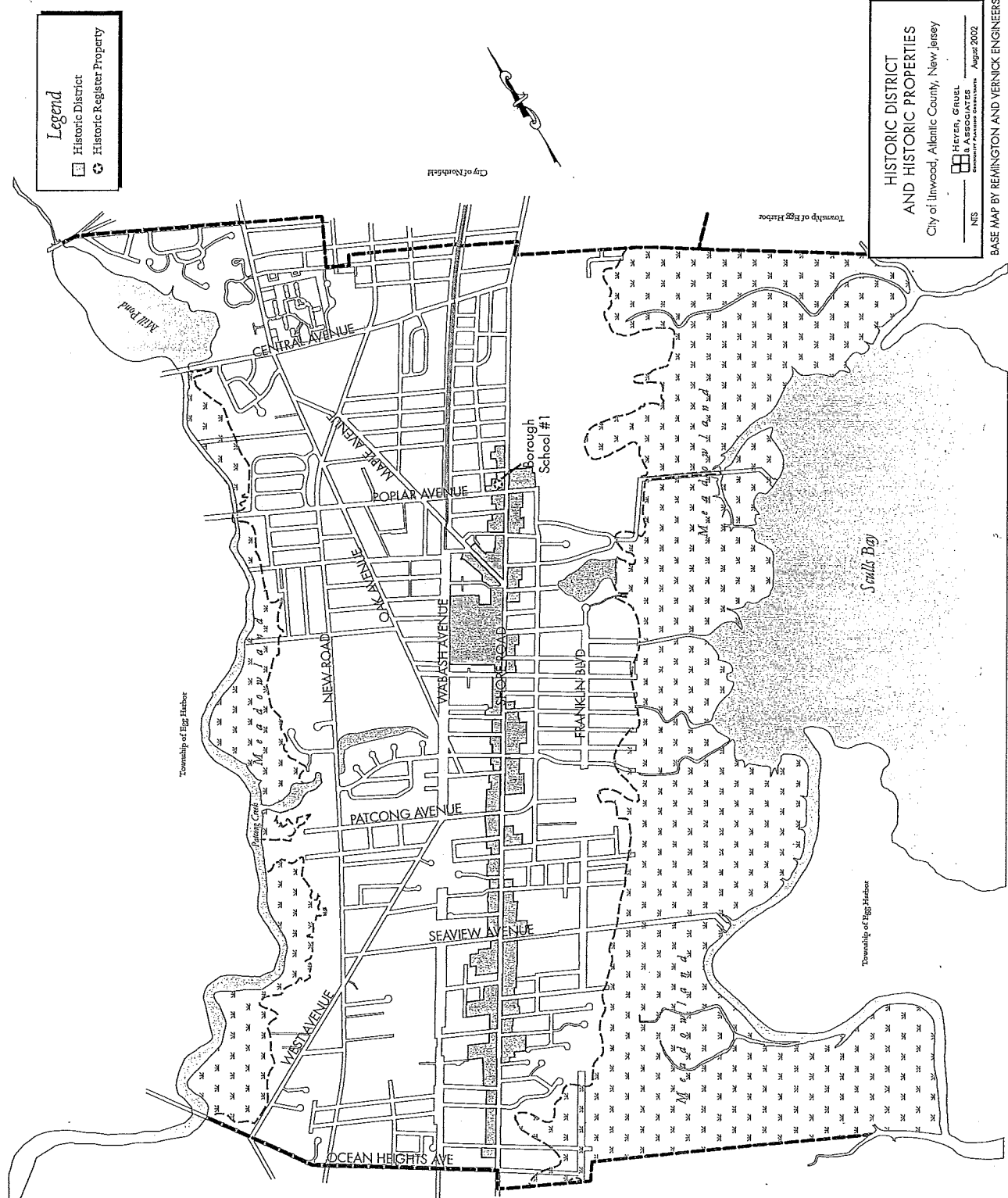
Table 11: Linwood Historic Resources

Resource Name	Address	National Listing Date	State Listing Date	State ID#
Linwood Borough School #1	16 W. Poplar Ave.	12/20/1984	11/1/1984	346
Linwood Historic District	Shore Road from Royal Avenue to Sterling Avenue	7/13/1989	4/27/1989	347

Source: State and National Registers of Historic Places

Linwood Borough School #1, a one-room schoolhouse constructed in 1873, is located within the Historic District and also listed separately on the National Register. The schoolhouse, which has at various times housed the municipal building and the public library, is currently home to the Leedsville School Museum, which is operated by the Linwood Historical Society on a 99-year lease.

The Historical Society also operates the James Kirk Maritime Museum in the basement of the current Library. Its displays focus on the shipbuilding and shellfishing heritage of the City.



Legend

- Historic District
- Historic Register Property

HISTORIC DISTRICT AND HISTORIC PROPERTIES
City of Inwood, Atlantic County, New Jersey

NTS

HEYER, GRUEL & ASSOCIATES
COMMUNITY PLANNING CONSULTANTS August 2002

BASE MAP BY REMINGTON AND VERNICK ENGINEERS

RECOMMENDATIONS

- The City should monitor the Shore Road Historic District for changes such as tear-downs and major renovations. Currently, major changes are not occurring in the historic district. However, if property owners begin to undertake significant structural alterations, the City should consider implementing a Historic Preservation Commission to review these changes.
- The City should continue to support the activities of the Historical Society including its two museums.
- The City should consider conducting a survey to identify additional properties for nomination to the State and National Registers of Historic Places.
- The City should ensure that any future changes to Shore Road or any intersections within the Historic District respect the historic character of the District.

Compatibility of other Plan Elements with Historic Preservation Element

The following is an evaluation of the specific impact of each element of the Master Plan on the City's historic sites and districts.

Circulation Element

No specific transportation projects are proposed in the Historic District. If the Poplar Avenue and Central Avenue intersections with Shore Road are redesigned, the City should evaluate the potential impacts of the project on the historic character of the area.

Community Facilities Element

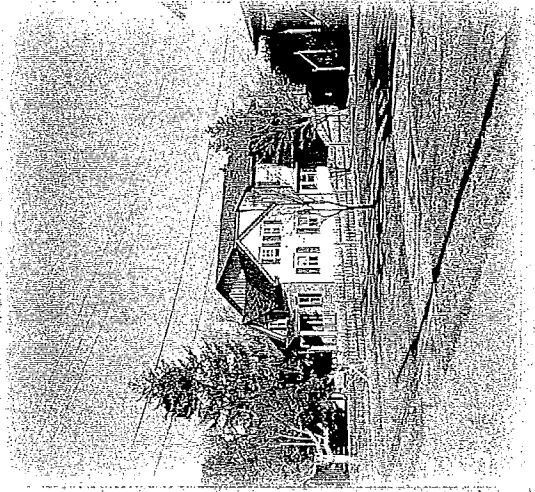
No proposed changes to community facilities are located in the Historic District.

Conservation Element

The Historic District is located within Planning Area 1 (Metropolitan Planning Area). Conservation proposals for the Environmentally Sensitive Planning Area will not affect the Historic District.

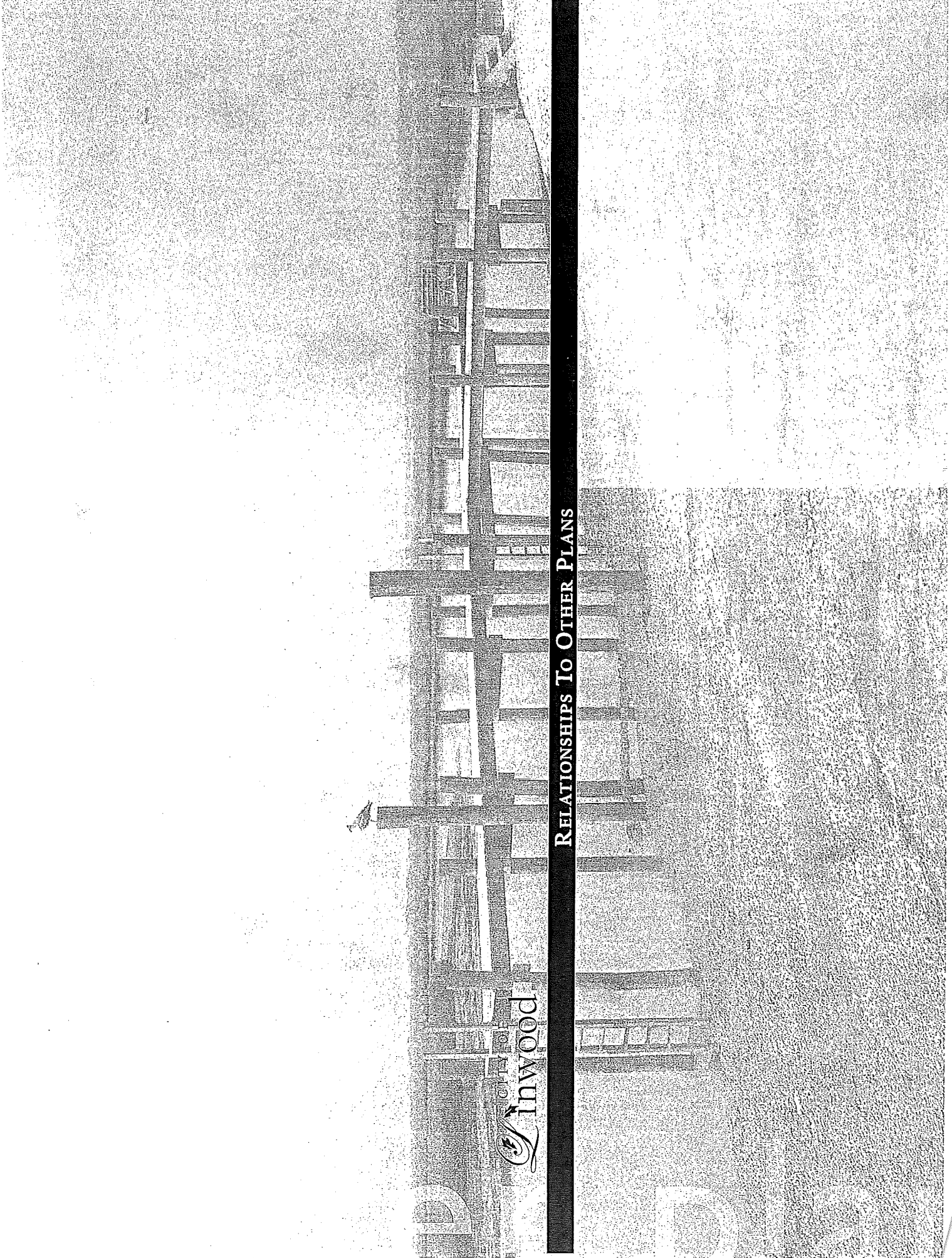
Parks and Recreation Element

No major changes are proposed for All Wars Memorial Park, the only park located in the Historic District.



Land Use Element

The Land Use Element recommends few changes that would affect the Historic District or historic sites. The proposal to designate a Neighborhood Business district at Shore Road and Maple Avenue would help to preserve the character of the area.



RELATIONSHIPS TO OTHER PLANS

STATE DEVELOPMENT AND REDEVELOPMENT PLAN

The Linwood Master Plan is generally consistent with the plans and policies of the New Jersey State Development and Redevelopment Plan (SDRP), adopted in 2001. The State Plan has eight goals:

- Revitalize the State's cities and towns.
- Conserve the state's natural resources and systems.
- Promote beneficial economic growth, development, and renewal for all residents of New Jersey.
- Protect the environment, prevent and clean up pollution.
- Provide adequate public services and facilities at a reasonable cost.
- Provide adequate housing at a reasonable cost.
- Preserve and enhance areas with historic, cultural, scenic, open space and recreational value.
- Ensure sound and integrated planning and implementation statewide.

The Linwood Master Plan is consistent with these goals by promoting the preservation and enhancement of an existing, long-established residential community; protecting Linwood's natural resources, particularly its wetlands and water bodies; promoting the fiscally sound expansion of municipal services; and promoting the preservation of Linwood's historic, scenic, and recreational assets. As called for in the SDRP, the Linwood Master Plan is also consistent with higher levels of planning, including the Atlantic County Master Plan and the Atlantic County Parks and Open Space Plan.

The State Plan Policy Map of the SDRP divides the State into five Planning Areas, each of which has specific policy recommendations associated with it. The City of Linwood lies in portions of two Planning Areas: the Metropolitan Planning Area (PA1), and the Environmentally Sensitive

Planning Area (PA5). In general, the developed portion of the City is located in PA1, and the meadowlands are located in PA5. These State Planning Areas have been incorporated into NJDEP's Coastal Zone Management Rules at 7:7E-5B.1 et. seq. For coastal regulatory purposes, Linwood falls into the Coastal Metropolitan Planning Area and the Coastal Environmentally Sensitive Planning Area. The boundaries are the same as the SDRP Policy Map boundaries for PA1 and PA5, respectively.

The State Plan designates PA1 as the Planning Area into which most of the State's future growth is to be directed. Throughout PA1, efficient and beneficial utilization of scarce land resources is to be encouraged. Open space in PA1 is to be used to preserve linear natural systems, to reinforce community identity, and to link to other planning areas. The City of Linwood is almost fully built out in PA1. The Land Use changes proposed in the Master Plan will encourage more efficient utilization of land by preventing large-scale, single use development from disrupting the historic land use pattern of the community. The Master Plan identifies the potential for expansion of the bike path as a linear natural corridor connecting the meadowland to the center of the community. New parks that are proposed will reinforce community identity by preserving significant open spaces and historic resources.

The State Plan identifies PA5 as an area in which large contiguous areas of land are to be preserved in their natural state. Linwood's meadowlands are located in PA5. The Linwood Master Plan continues to protect this area by maintaining the Conservation land use designation, which prohibits all development within the Linwood meadowlands except essential utilities. Most of PA5 in Linwood is undeveloped and will remain so under Linwood's current land use policies.

ATLANTIC COUNTY MASTER PLAN

The Linwood Master Plan is generally in conformance with the Atlantic County Master Plan, adopted in 2000. The plan has 11 goals:

- Enhance the quality of life for County residents by expanding active recreation opportunities through the acquisition and development of an extensive County Park System.
- Ensure quality growth and development by planning and developing County infrastructure to complement land use goals established by State and local plans.
- Encourage a diversity of economic opportunities for job creation to compliment the new convention facilities and expected casino growth.
- Promote the location of research and development businesses for mutual benefit of industry, job searchers and the colleges in Atlantic County.
- Coordinate the planning and development of adequate potable water supply and wastewater treatment capacity to accommodate future growth.
- Preserve and enhance the quality of the natural resources of the County.
- Preserve selected critical natural areas supporting endangered species and wildlife habitat.
- Promote safe and efficient transportation systems for access to the County and within the County, including air, rail and motor vehicle systems.
- Preserve and make more efficient use of existing roadway capacities by encouraging sound land use planning and highway access control.
- Preserve and protect the farmland and occupation of farming within the County.
- Preserve the historic and cultural resources in the County.

The Linwood Master Plan will contribute to the achievement of the goals adopted in the County Master Plan in several ways. The Linwood Master Plan calls for the expansion of recreation opportunities through development of additional parks and open space in the City. Linwood's Master Plan will also encourage quality growth and development by recommending the adoption of land use regulations that ensure high quality development. As an existing City, Linwood is fully served with infrastructure and will not require an expansion of water or sewer service areas. Through the Master Plan, the City will continue its legacy of protecting its meadowlands in a natural state. The City will further protect this resource by completing an Environmental Resource Inventory. In transportation, the Circulation Element suggests changes that will result in more safe and efficient use of Linwood's residential access streets and major arterial streets. Also, by maintaining its Historic District, the City will continue to protect its heritage as a historic community. One of the policies called for in the Atlantic County Master Plan is the inclusion of a Historic Preservation Elements in each municipality's Master Plan.

SURROUNDING COMMUNITIES

Linwood is bordered on its east and west by the Township of Egg Harbor, a large, diverse municipality characterized both by a significant amount of new development and by large areas of environmentally constrained marshland, particularly to the east of Linwood. The City is bordered by the cities of Northfield and Somers Point on its north and south, respectively. Both are existing developed communities with well-established residential neighborhoods and commercial districts. These communities also participate in the regional tourist economy to a greater degree than Linwood and have tourist amenities such as hotels and restaurants.

Egg Harbor Township has zoned the area east of Linwood as Conservation-Recreation-Wetlands, which is compatible with Linwood's adjacent Conservation district. This area consists mainly of marshland and open water. The area to the west of Linwood in Egg Harbor Township is zoned for low and medium density residential development. New development in this area, which was formerly rural, will likely result in increased traffic to commercial developments on New Road in Linwood, Northfield, and Somers Point. Development in this area could also impact water quality in Parcong Creek, which is protected in Linwood by the Conservation zoning district. The City should work with Atlantic County and other entities to encourage environmental protection bordering the creek in Egg Harbor Township.

The section of Somers Point which borders Linwood is characterized by an environmentally sensitive area on the east, adjacent to Linwood's meadowland; a single-family residential area in the center; and a business district bordering New Road. The Somers Point zoning ordinance encourages large-scale commercial development in this business district, which serves to encourage the conversion of residences to commercial uses on New Road in Linwood.

The area of Northfield bordering Linwood is characterized by low to medium density developed residential areas. No changes are anticipated for this area, and the existing use is compatible with the contiguous area of Linwood, which consists of similar uses.