

**Borough Of Metuchen  
Middlesex County, N.J.**

**1983  
LAND USE PLAN ELEMENT**

**PREPARED BY**



**FROST ASSOCIATES  
CONSULTING ENGINEERS & PLANNERS**

This Master Plan element reflects twelve (12) months of diligent research and discussion by the members of the Metuchen Borough Planning Board who were led in this undertaking by the Master Plan Subcommittee and aided substantially by the review and comments of the members of the Master Plan Advisory Committee and the Metuchen Development Commission.

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BOROUGH OF METUCHEN  
MIDDLESEX COUNTY, NEW JERSEY

LAND USE PLAN ELEMENT  
ADOPTED MARCH 17, 1983

The preparation of this report was financially aided through a Federal grant from the Department of Housing and Urban Development, under the Urban Planning Assistance Program authorized by Section 701 of the Housing Act of 1965, as amended.

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The original copy of this report has been signed and sealed in accordance with N.J.A.C. 13:41-1.3 (b) and transmitted to the client.

Marshall Frost, P.E., P.P.      DATE

Elizabeth C. McKenzie, P.P.      DATE



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## INTRODUCTION

The land use plan element of a master plan is the foundation of the municipal planning process in that it establishes the basis for zoning.

The Municipal Land Use Law (N.J.S.A. 40:55D-1 et seq.) provides that a municipal governing body "may adopt or amend a zoning ordinance relating to the nature and extent of the uses of land and of buildings and structures thereon... (only) after the planning board has adopted the land use plan element of a master plan..." Moreover, the Law states that "all of the provisions of such zoning ordinance or any amendment or revision thereto shall either be substantially consistent with the land use plan element of the master plan or designed to effectuate such plan element ..."

According to the statute, the land use plan element is a document

(a) taking into account the other master plan elements and natural conditions, including, but not necessarily limited to, topography, soil conditions, water supply, drainage, flood plain areas, marshes, and woodlands, (b) showing the existing and proposed location, extent and intensity of development of land to be used in the future for varying types of residential, commercial, industrial, agricultural, recreational, educational and other public and private purposes or combination of purposes, and (c) including a statement of the standards of population density and development intensity recommended for the municipality.

The land use plan element thus synthesizes and balances the other considerations affecting land use planning policies.

The Borough of Metuchen has been the subject of numerous planning studies. In 1967, Candeub, Fleissig Associates prepared a Master Plan for the municipality which reviewed all phases of Metuchen's development, including existing land use patterns, housing conditions, transportation and traffic circulation, community facilities, population trends and demographic characteristics, the economic base and fiscal considerations.

The firm of Boorman and Dorram evaluated the feasibility of low-rise versus high-rise apartment buildings in another report entitled Zoning for Multi-Family Housing in Metuchen, New Jersey. This report, published in 1973, evaluated housing needs and demands in Metuchen and proposed zoning for low-rise garden apartments and townhouses in a number of locations.

In 1976, following the adoption of the Municipal Land Use Law, Candeub, Fleissig Associates prepared an update of the land use plan element of the Master Plan based upon changes in policies directed particularly toward the selection of new locations for multi-family housing development. Their report, adopted as the Amendment to the Master Plan, incorporated the proposals in the 1973 Boorman and Dorram study and recommended additional sites for multi-family use, as well. These sites were subsequently rezoned for multi-family use.

Candeub, Fleissig Associates also undertook a study of the downtown area of Metuchen for the Parking Authority in 1971. The study focused on land use and circulation in the downtown area and specifically suggested that higher density retail and office development be considered using the Parking Authority as the vehicle for land assembly for such purposes. The proposals also included the creation of a multiple-decked parking garage at the Halsey Street lot.

The Rutgers Urban Design Studio, 1979-1980, evaluated the potential for redevelopment of Metuchen's downtown in a study entitled Metuchen 2001. Five proposals for the downtown were set forth. One was primarily a landscaping plan with no changes in land use; the other four involved high density redevelopment of the blocks bounded by Conrail (Penn Central Railroad), Main Street, Middlesex Avenue and Lake Avenue with a mixture of office, retail and residential development in a variety of proportions and configurations.

The purpose of this analysis is to update the land use plan presented in the 1976 Amendment to the Master Plan in light of the proposals discussed in the Metuchen 2001 report with respect to the central business district and also to specifically evaluate the northwest quadrant of the Borough for possible alternative uses of vacant and underdeveloped land which has heretofore been zoned for industrial purposes.



A separate Housing Plan Element has been prepared by Frost Associates which presents certain background data and goals and objectives pertaining to housing and summarizes previous and current recommendations with regard to housing issues. These recommendations will be weighed in the Land Use Plan Element against concerns for natural conditions, traffic circulation, parking, existing development and the plans and policies of Middlesex County, the State of New Jersey and Edison Township, which surrounds the Borough of Metuchen. The sections of the report which follow present the issues which constrain the development of Metuchen, set forth the specific proposals embodied in the Land Use Plan and suggest implementation strategies, evaluate the probable impacts of the Land Use Plan in terms of public services and facilities, traffic, energy conservation, the environment and historical sites, and evaluate the Plan's relationship to the policies of other political jurisdictions.

## PLANNING CONSIDERATIONS AND ISSUES

### Regional Location

The Borough of Metuchen consists of 2.8 square miles situated in the north-central portion of Middlesex County. It is surrounded entirely by the Township of Edison and is located approximately twenty-five (25) miles from Manhattan.

Metuchen is bordered on the southwest by Route 287, which intersects with Route 1 at the municipality's southernmost corner. Route 27 bisects Metuchen. These three (3) routes in turn provide linkage to the rest of the regional road network, including the Garden State Parkway and the New Jersey Turnpike. The Borough is also served by the main line and two lesser lines of Conrail. These railroad lines cut through in several different directions.

Metuchen's location has both advantages and disadvantages. On the one hand, Metuchen residents are within easy commuting distance of New York City, Newark Airport and the New Jersey shore area. On the other hand, the heavy traffic flows along Route 27 and the amount of land occupied and affected by the railroad lines are contrary to the essentially suburban residential character of most of the Borough and an impediment to planning efforts.

### Development History

As documented in the Housing Plan Element prepared by Frost Associates, Metuchen's peak period of development occurred during the 1940's and 1950's, after World War II. In the 1960's, its rate of population growth slowed and, in the 1970's, actually reversed. The Borough's 1980 population of 13,751 persons represents a decrease of 14.2% from its 1970 population level. Nevertheless, 137 new housing units were constructed in the past decade (122 of them for senior citizens).

## Public Utilities

Most of the Borough is serviced by both a privately held water utility and public sanitary sewerage. Unsewered developed areas include Electric, Westinghouse and Weston Streets, (currently (1982) being sewerred), Volkman Street, Adams Street, Factory Street, part of Aylin Street, Liberty Street, parts of Bell and Norcross Avenues, the residential portion of Central Avenue south of Middlesex Avenue and Woodwild Terrace. Westinghouse, Electric, and Adams Streets lack public water.

The Middlesex Water Company supplies water to Metuchen and owns and maintains the water distribution system. Water supply sources include the Delaware and Raritan Canal, wells, and wholesale purchases. The water company indicates that there are no constraints to any future development in Metuchen in terms of available water supply.

Sewage treatment is provided by the Middlesex County Sewerage Authority (MCSA) which also treats the sewage from twenty-four (24) other municipalities and ten (10) major industries. The Authority has recently undergone an expansion of its treatment facilities and is now designed to handle 120 million gallons per day of effluent. Currently, it treats an average of eighty-five (85) million gallons per day. Of this, Metuchen contributes roughly 1.7 million gallons daily. According to the MCSA, there would be no difficulty in providing additional treatment capacity to the Borough. Metuchen Borough maintains its own sewage collection system.

## Public Schools

The Borough of Metuchen supports its own school system consisting of five (5) buildings: the Metuchen High School accommodates grades 9-12; the Franklin School (middle school) houses grades 7 and 8; and Campbell, Moss and Edgar Schools each house grades K-6. The enrollment by grade and the functional capacity of each building are presented on Table 1. As indicated, the enrollments fall well below the functional capacities of the buildings. With perhaps some renovation, the existing school facilities hypothetically could

handle as many as 976 additional schoolchildren before any new facilities would be required, assuming that the distribution of students among the various schools were reasonably even. In terms of new residential development, this translates to:

855 single family homes or

1,490 townhouses or

8,714 two-bedroom garden apartments or

2,037 duplex, triplex or fourplex units

While nowhere near this amount of new residential construction could be accommodated within the Borough, the figures dramatize the extent of the capacity which exists in the Metuchen school system.

TABLE 1  
 METUCHEN PUBLIC SCHOOLS  
 ENROLLMENTS AND CAPACITIES

<u>School</u>	<u>Functional Capacity</u>	<u>Enrollment</u>	
		Grade	#
Metuchen High School	1,049	12	206
		11	204
		10	198
		9	<u>168</u>
		TOTAL	776
Franklin Middle School	807	8	163
		7	172
		Vocational shared time	<u>4</u>
		TOTAL	399
Campbell School	498	6	70
		5	65
		4	61
		3	68
		2	54
		1	42
		K	<u>40</u>
TOTAL	400		

		Grade	#
Moss School	397	6	68
		5	46
		4	51
		3	61
		2	43
		1	49
		K	32
		Spec. Ed.	<u>8</u>
		TOTAL	358
Edgar School	408	6	47
		5	43
		4	29
		3	45
		2	45
		1	43
		K	41
		Spec. Ed.	<u>17</u>
		TOTAL	310

TOTAL FUNCTIONAL CAPACITY: 3,159      TOTAL DISTRICT ENROLLMENT: 2,183

Source:

Enrollments as of May 29, 1981 are from the Office of the Business Administrator, Metuchen Board of Education. Capacities are from the Facilities Master Plan prepared by Robert Strauss Associates, adjusted to correct for relocated portable classrooms.

## Existing Land Use

A lot-by-lot survey of existing land uses in the Borough of Metuchen was undertaken by Frost Associates as part of the preparation of the Land Use Plan Element. In general, Metuchen has remained residential in character; there have been few substantial changes in land use since 1966, when existing uses of land were last surveyed. The most significant changes have involved the development of previously vacant parcels with apartments and townhouses. The exhibit entitled Existing Land Use, June, 1981, (Plate 1), displays current uses of land in the Borough.

For the purposes of the study, land uses were classified into twelve (12) separate categories: single-family residential, multi-family residential (two or more families), public facilities and buildings, quasi-public uses, parks and recreation, retail commercial, office, industry/warehousing, research/laboratory, salvage/storage, parking lots and vacant land.

As is evident from the exhibit, the predominant land use in the Borough is single-family residential. Residential densities and housing conditions were discussed in considerable detail in the Housing Plan Element, prepared by Frost Associates.

Multi-family residential development in Metuchen ranges from two-family houses to mid-rise senior citizens apartments. Except for the senior citizens project, multi-family projects in the Borough are tending to be constructed as, or later converted to, condominium ownership rather than rentals.

Public facilities and buildings include the public schools and municipal facilities such as the public works garage, recreation department, Borough Hall and library. Quasi-public uses include the rescue squad building on Safety Place, cemeteries, churches, the YMCA, private schools and public utilities.

Parks and recreation includes open space and recreational facilities exclusive of school playground equipment. Metuchen contains approximately eighty (80) acres of parkland other than school playgrounds. Of these eighty (80) acres,

roughly thirty-five (35) acres are devoted to active recreation facilities. The remainder are reserved for open space/conservation or passive recreational purposes. This translates into one acre of open space for every 306 persons in Metuchen and one acre of recreational parkland (excluding schools) for every 393 Borough residents. Considering school playground facilities these ratios of open space and recreational lands to population are adequate, but not generous, according to accepted planning standards. A substantial amount of new development or redevelopment would require the creation of additional recreational areas and facilities to service the added population.

Retail commercial uses include a wide variety of businesses which tend to be oriented toward local convenience shopping needs. Only those along Route 27 near the Route 287 interchange appear to serve a regional market. Existing office uses are primarily professional and medical in nature. Few administrative or executive offices exist in Metuchen.

Industrial/warehouse uses constitute the third largest land use category in the Borough. As indicated on the exhibit, a number of the industrial or warehouse buildings which currently exist in the Borough are vacant. In addition, over 92 acres or 40.6% of the 227 acres of land which are zoned industrially are unoccupied. Metuchen's industrial zone is characterized by its relatively poor access to major highways compared to the other industrial areas in the region. Research/laboratory uses are small and few in number, again reflecting the lack of available developable land in the Borough which would also have sufficient visibility to attract such uses. Salvage or storage areas are self-explanatory. Their principal characteristic is their temporary nature. Land so used is potentially ripe for redevelopment. Except for those uses at the far end of the Forrest Street cul-de-sac, which are removed from residential areas, most of the industrial, research and salvage types of uses have a negative impact, in terms of visual appearance, on surrounding residences.

A common problem in Metuchen is the extent to which non-residential uses encroach upon residential areas. This phenomenon results from Metuchen's location vis-a-vis the regional transportation network, since highways and railway frontage tend to attract and encourage non-residential activities, and the Borough's age and history of development, much of which predates zoning.



PLATE 1

Existing Land Use, June 1981  
See Large Scale Map on  
Display in the Borough Hall

The most significant land use conflicts occur in the northwest quadrant of the Borough where there is a relatively large amount of vacant land remaining and, in addition, some vacant industrial buildings (four (4), at the time the survey was conducted). Residential neighborhoods include an area north of Durham Avenue where unpaved streets and lack of sewerage (now being corrected) combine with poor housing quality. The visual blight associated with nearby industrial properties contributes further to the deteriorated housing conditions in this area. Immediately adjacent to this neighborhood, however, is a single family residential area of attractive and well-maintained homes, most of which lie within Edison Township. Clearly, location alone is not responsible for the poor housing and neighborhood conditions north of Durham Avenue in Metuchen.

Most of the northwest quadrant has been zoned for industrial and commercial purposes for many years. However, the presence of vacant buildings and lots in the industrial zone suggests that the area's desirability for industrial purposes may have waned. A reevaluation of present land use policies in the northwest quadrant should consider ways of improving the residential neighborhoods as well as making the area more attractive for developers.

Another area where land use conflicts exist and may evolve further is in the northeast corner of the Borough, north of the Conrail line, adjacent to Edison Township. While the zoning in this area is "R-1" single-family residential, except for the apartment complex, which is zoned "R-4" multi-family residential, a number of properties are developed with non-residential uses. This reflects the area's proximity to commercial development in Edison Township and also the access and visibility provided by Route 27. However, the area needs clarification. A reevaluation of the current zoning, and a recommendation to either reaffirm or revise, may help to avert improper development of some potentially redevelopable parcels on the south side of Middlesex Avenue.

Metuchen's central business district provides a wide range of goods and services oriented to a local market. Two issues arise in considering its future: the availability of parking (to be discussed in a later section of this report) and the maintenance of its viability by restricting retail and

service commercial development in other commercial zones to uses which do not duplicate those which exist or are sought in the downtown. At this time, the zoning of the central business district permits the full range of uses which already exist there. However, these uses are also permitted in other commercial zones in the Borough which have potentially better access and greater parking availability. A more organized approach to the uses which should be permitted in each of the business zones is warranted.

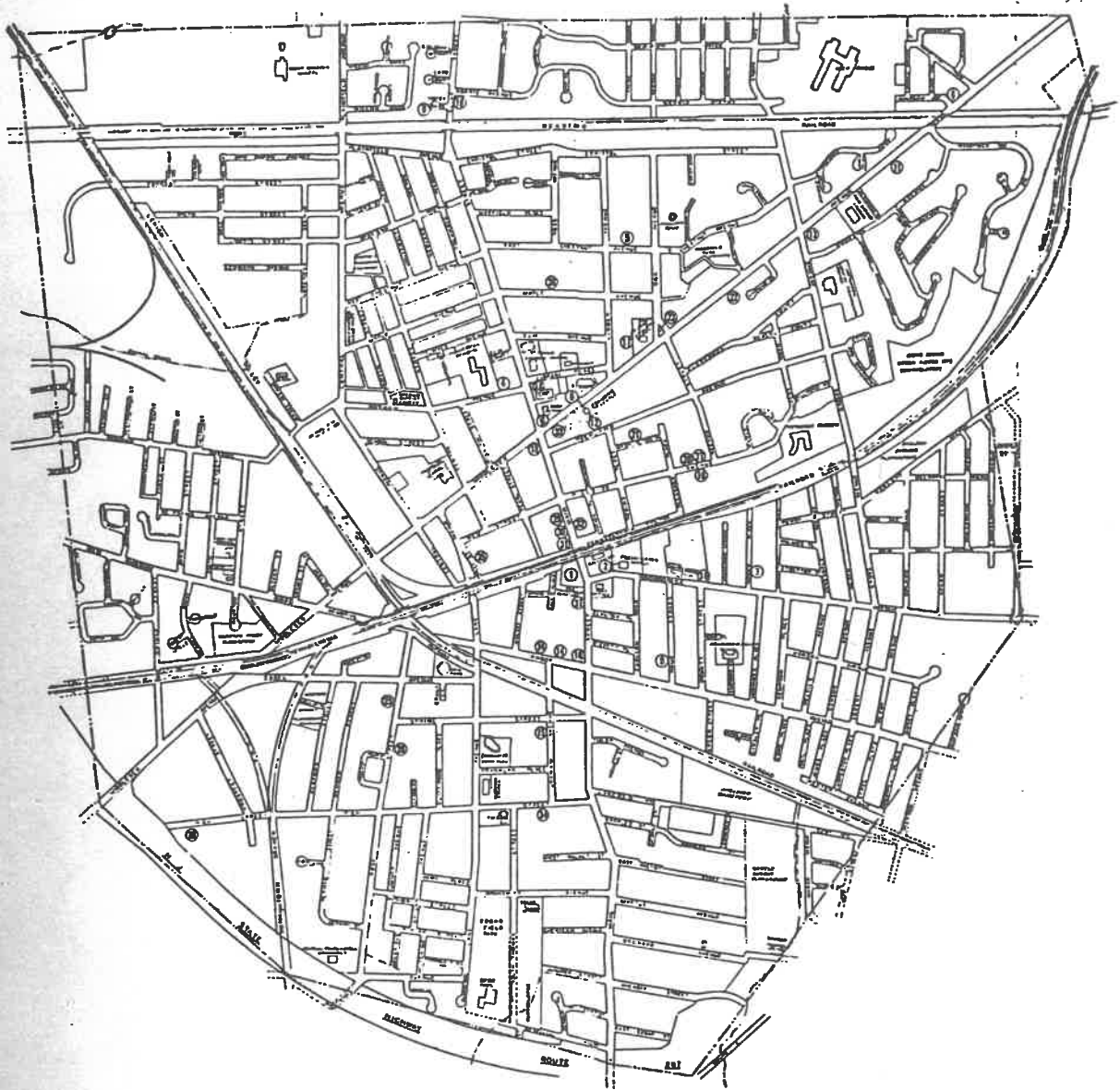
### Historic Sites

Plate 2 presents the locations of historic sites within the Borough of Metuchen as mapped by Candeub, Fleissig and Associates in the Natural Resources Inventory prepared for the Metuchen Environmental Commission in 1976. The NRI documents the existence of 37 separate historic sites and describes their historic significance. However, only two (2), the Old Franklin School House (#12 on the plate) and the Fairweather House at 191 Middlesex Avenue (#11 on the plate), are actually included in the National Register of Historic Places.

### Environmental Considerations

The Natural Resources Inventory prepared for the Borough in 1976 by Candeub, Fleissig and Associates reviewed both the natural and man-made environmental features of the Borough. Although Metuchen is "approximately 90% developed for urban use", about five percent (5%) of its land area is in parks and playgrounds and about five percent (5%) in scattered vacant land. The NRI contains an extensive analysis of the various open spaces, both public and private, within the Borough. Portions of that analysis pertaining to vacant, potentially developable parcels of land are excerpted in the Housing Plan Element, prepared by Frost Associates, with a recommendation that the Land Use Plan Element evaluate their suitability for various forms of new development. Plate 3 shows the significant parcels of vacant land identified in the Natural Resources Inventory as well as two additional vacant parcels not considered by the Environmental Commission. The physical characteristics of each parcel are described in the ensuing paragraphs.

CHIEF OF POLICE  
1. OLD PRE  
2. PRESENT  
3. A. OLD  
4. PRES  
5. WRS. CA  
6. OLD STA  
7. HILBERT  
8. THE DA  
9. THE DA  
10. THE JO  
11. THE FA  
12. THE OL  
13. THE LE  
14. THE RE  
15. THE IN  
16. THE AI  
17. ST. U  
18. THE G  
19. CHURCH  
20. THE C  
21. THE V



**HISTORIC SITES**

1. OLD PRESBYTERIAN CEMETERY
2. PRESBYTERIAN CHURCH
3. A. OLD PRESBYTERIAN PARSONAGE
4. PRESENT PRESBYTERIAN PARSONAGE
5. MRS. CATHERINE ALLEN'S TAVERN
6. OLD STAGECOACH HOUSE
7. MILESTONE MARKERS (THREE)
8. THE DANIELS HOUSE
9. THE BOOS HOUSE
10. THE SHREVEPARKER'S HOUSE
11. THE JOHN HUPPES HOUSE
12. THE FAIRWEATHER HOUSE
13. THE OLD FRANKLIN SCHOOL HOUSE
14. THE LEWIS THOMAS HOUSE
15. THE REV. T. BRADFORD HOUSE
16. THE BRADY GRANHAM THOMAS HOUSE
17. THE AVRES (AYERS) HOUSE
18. ST. LANE'S EPISCOPAL CHURCH
19. THE OLD CENTENARY METHODIST EPISCOPAL CHURCH
20. THE CEPHAS G. HAYTE HOUSE
21. THE VAN SICKLE HOUSE

22. METUCHEN'S FIRST LIBRARY
23. THE BARRONDS HOUSE
24. THE OLD HORSE WATERING TROUGH
25. THE CORTRIGHT HOUSE
26. THE OLD PUNDY HOUSE
27. THE PATTERSON HOUSE
28. THE FOX HOUSE
29. THE OLD THORNTON FARM
30. FORMER BORDUGH HALL AND ROBIN'S HALL (401 MAIN ST.)
31. THE OLD HANNEGAN'S BAKERY
32. THE OLD CROWELL'S LIVERY STABLE AND FEED STORE
33. THE EAGLE HOOD AND LADDER COMPANY BUILDING
34. THE WASHINGTON HORSE COMPANY BUILDING
35. THE OLD THOMAS HOUSE
36. THE ANNEE OF METUCHEN'S OLD WOODS HIGH SCHOOL (NOW THE AMERICAN LEGION BUILDING)
37. METUCHEN'S FORMER OLD FOLKS HOME (165 MAPLE AVE.)
38. THE SOPER HOUSE (351 MAIN ST.)

PLATE 2



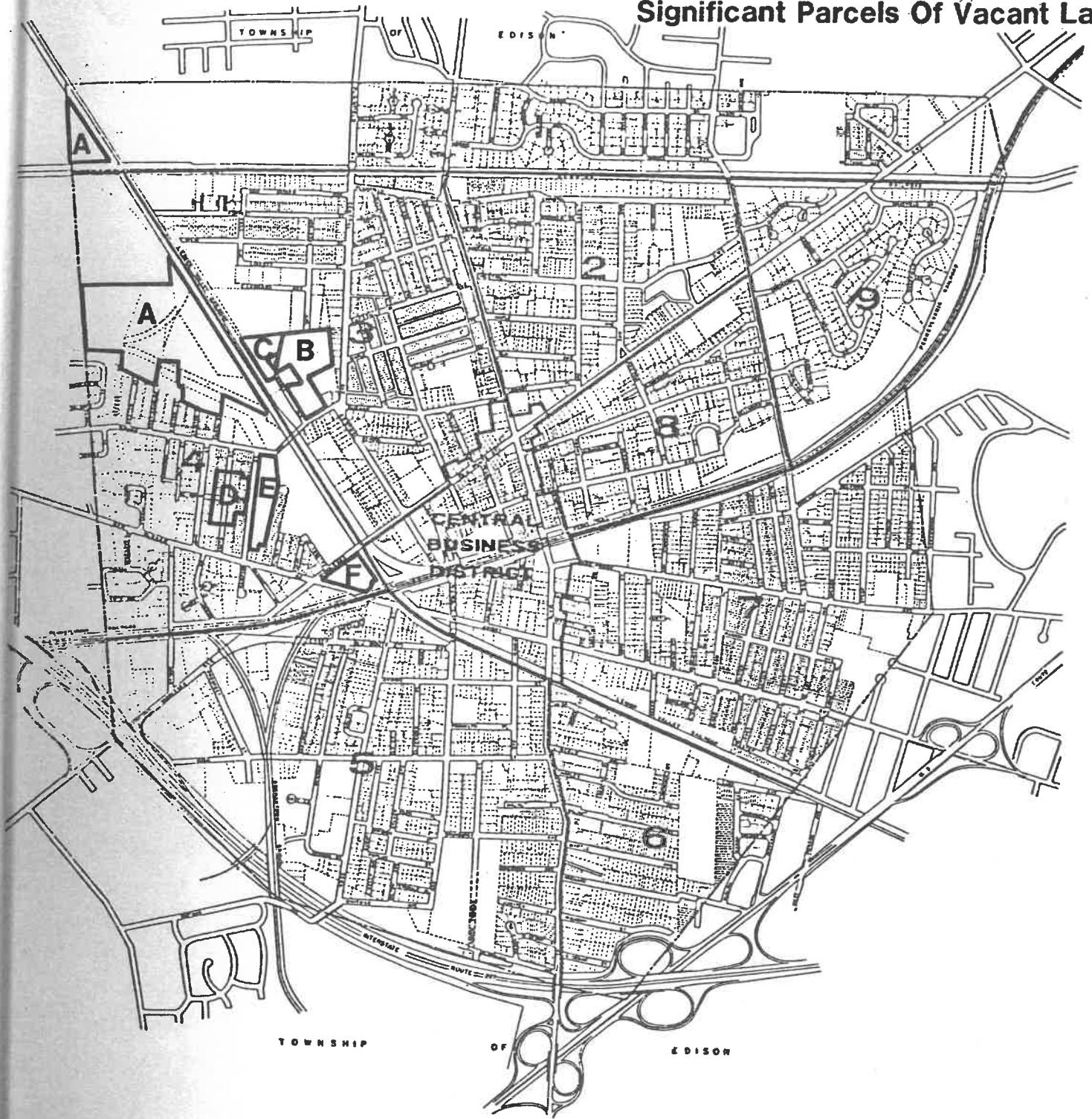
**Map 6  
Historic Sites**

**METUCHEN ENVIRONMENTAL COMMISSION  
BOROUGH OF METUCHEN, NEW JERSEY**

PLANNING CONSULTANT: CARBON, FLECKEN AND ASSOCIATES

AUGUST, 1970

# Significant Parcels Of Vacant Land



- A Dismal Brook Area
- B Lawler Property
- C Borough Garage Property
- D Hampton And Smith Street Lots
- E Vacant Industrial Land
- F Vacant Commercial Land



**BOROUGH OF METUCHEN**  
**MIDDLESEX COUNTY, NEW JERSEY**  
 PLANNING CONSULTANT / CAMDELL, FLEISCHG AND ASSOCIATES NOV, 1966

Graphic Display Prepared By Frost Associates.

Parcel A consists of several undeveloped lots, both privately and publicly (10.83 acres) owned, in the vicinity of Dismal Brook in the Borough's northwest corner. The land is low in elevation and flat, with a high water table. Dismal Brook receives much of the Borough's storm drainage, both directly and indirectly, through ditches and streams which flow into it. The area tends to act as a natural detention basin during periods of heavy rainfall. Access to much of the area is poor or nonexistent; development of the more environmentally stable portions of Parcel A would involve access through streets intersecting with, or properties fronting on, Durham Avenue to avoid encroachment on Dismal Brook.

Parcel B consists of 9.9 acres of privately owned land surrounding the grocery store and bank at the intersection of Jersey and Durham Avenues. It is traversed by drainage easements and much of it currently serves as a storage yard for discarded heavy metal equipment.

Parcel C encompasses the 3.01 acres of Borough-owned land surrounding the Borough garage. The land is used as a storage yard for materials and debris by the Department of Public Works. Formerly, portions of the property near Forrest Street were used as a dump.

Parcel D is comprised of undeveloped lots and paper streets lying between Hampton and John Streets. At one time the Borough owned 1.68 acres of the total of nearly ten (10) acres, according to the Boorman and Dorram report (1973); however, that land has recently been sold and is now privately owned by a corporation which owns no other parcels in the immediate vicinity. The land slopes from an elevation of 118 feet at New Durham Road to 90 feet at Durham Avenue and from 122 feet at John Street to 108 feet at Smith Street. Much of the change in elevation is due to previous land disturbance involving excavation and filling. Development would require extensive regrading and the use of retaining walls. The area is within a single family residential neighborhood.

Parcel E, which was not evaluated by the Environmental Commission in the NRI, consists of five (5) acres of vacant, relatively flat land which was, at one time, considered for a subsidized housing project by a local non-profit

sponsor. The site is industrially zoned and is located adjacent to the Oakite factory and opposite Gulton Industries, but residences exist to the east, on the other side of the Lehigh Valley Railroad tracks, and to the west, on both sides of Durham Avenue.

The second of the two (2) vacant parcels not considered by the Commission in the NRI is Parcel F, a 2.7 acre piece which is vacant and zoned for business. The parcel is flat and fronts on Middlesex Avenue. It is virtually surrounded by railroad tracks and industrial and business uses.

Of particular importance to the Land Use Plan Element is the delineation of flood prone areas. Plate 4 presents those portions of the Borough which are subject to flooding, according to the Flood Insurance Rate Map prepared by the Federal Insurance Administration for the U.S. Department of Housing and Urban Development. For planning purposes, the one hundred (100) year flood boundaries have the greatest significance in terms of the State and Federal regulations which affect development. Clearly, much of the vacant land in the northwest quadrant is subject to periodic flooding.

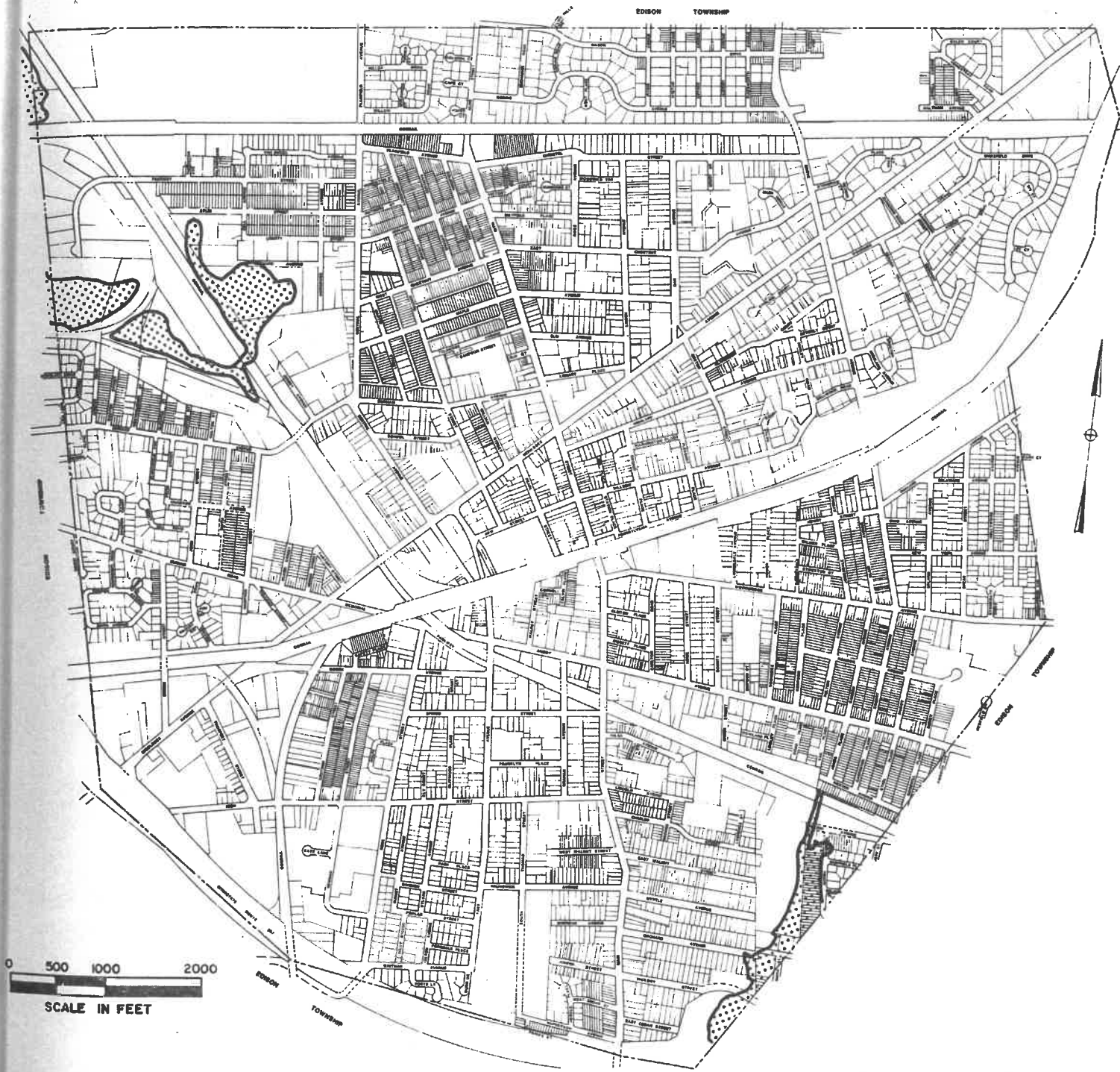


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BOROUGH OF METUCHEN  
Middlesex County, New Jersey

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Source: Flood Insurance Rate Map, December 4, 1979  
U.S. Dept. Of Housing And Urban Development

PLATE 4

100 Year Flood Boundary Map



## Metuchen 2001 Proposals

The Rutgers Urban Design Studio 1979-1980 undertook an extensive study of Metuchen's central business district, concluding with five (5) alternative proposals for the redevelopment of the blocks bounded by Conrail, Main Street, Middlesex Avenue and Lake Avenue. The five (5) proposals are encapsulized in the paragraphs below. Illustrative site plans showing four (4) of the five (5) proposals are also reproduced herein.

### Proposal #1

The first proposal is a phased landscaping and beautification program for the downtown. It does not attempt to provide for any new development or redevelopment.

### Proposal #2

The second proposal, reproduced on Plate 5, calls for three and four-story brick condominium/townhouses with some retail development, which would essentially replace existing space, and 24,000 square feet of office space. The proposal includes studio, one, two, and three bedroom dwelling units oriented for solar energy use. A total of 248 dwelling units are proposed to be constructed within the 7.9 acres of land lying in the two (2) blocks between Lake Avenue and Pearl Street, south of Middlesex Avenue, for a total residential density of 31.4 dwelling units per acre. Parking would be provided within the dwelling units and out-of-doors at ground level.

### Proposal #3

Proposal #3, shown on Plate 6, is a mixed-use development proposal involving 462 dwelling units at a density of 30 dwelling units per acre, 89,000 square feet of office space, and 8,800 square feet of retail space. The proposal involves the 15.85 acres within the four (4) blocks between Lake Avenue and Main Street, south of Middlesex Avenue. Parking is proposed in subsurface garages and decks. Structures are intended to be as high as eighteen (18) stories.

#### Proposal #4

Proposal #4 calls for 322 family dwelling units and 84 units of senior citizen housing. In addition 153,000 square feet of office space and 52,000 square feet of retail space are also proposed, all within the four (4) block study area. Parking spaces for 1640 vehicles would be provided in the redevelopment area within a five (5) level parking structure, on a second level deck, and at ground level. Proposal #4 is presented on Plate 7.

#### Proposal #5

Proposal #5 calls for the development of 15.4 acres of land with 184 dwelling units, 102,858 square feet of office space, and 95,484 square feet of retail space. It is reproduced on Plate 8. Parking is to be provided in a five (5) level structure which will be located to function as an acoustical barrier between the railroad and the residences. Buildings of up to ten (10) stories in height are proposed.

In discussions of the four (4) Metuchen 2001 proposals which involve active redevelopment, Planning Board members and other municipal officials have indicated a preference for low-rise residential development with some office/retail space. The overall density of development, both residential and non-residential, is a concern to Borough officials since it has a direct bearing on traffic and parking considerations.

#### Housing Considerations

The Housing Plan Element, prepared by Frost Associates, evaluates low and moderate income housing needs, journey to work patterns and demography as well as the characteristics of Metuchen's existing housing stock. Opportunities for new residential development are explored with particular emphasis on the physical constraints to the creation of new housing in Metuchen. The Housing Plan Element concludes with the recognition that housing needs must be balanced against such other planning factors as environmental constraints and

**METUCHEN**  
**2001**



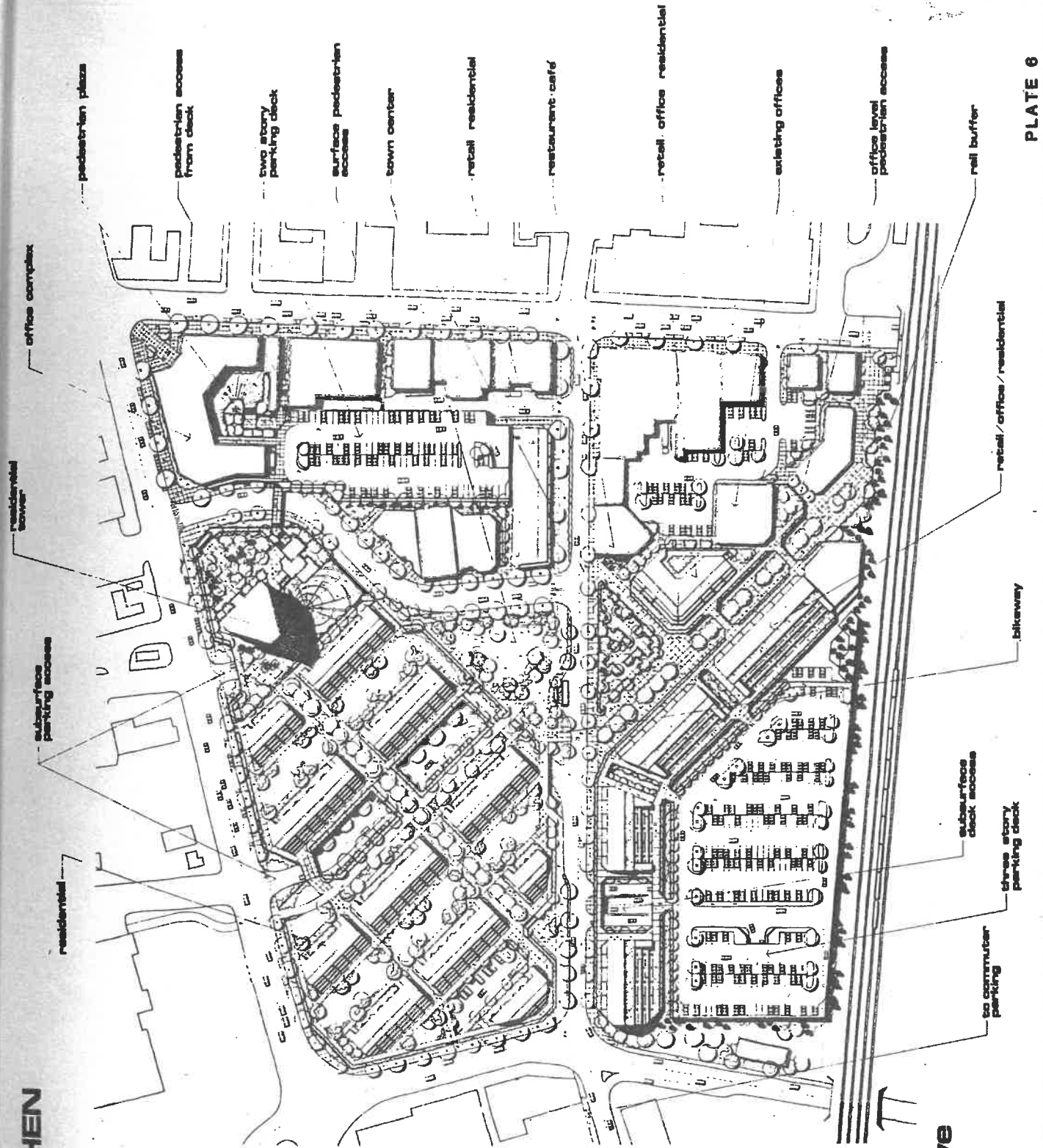
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scale feet

**ILLUSTRATIVE  
SITE PLAN**

**PLATE 5**

METUCHEN

2001

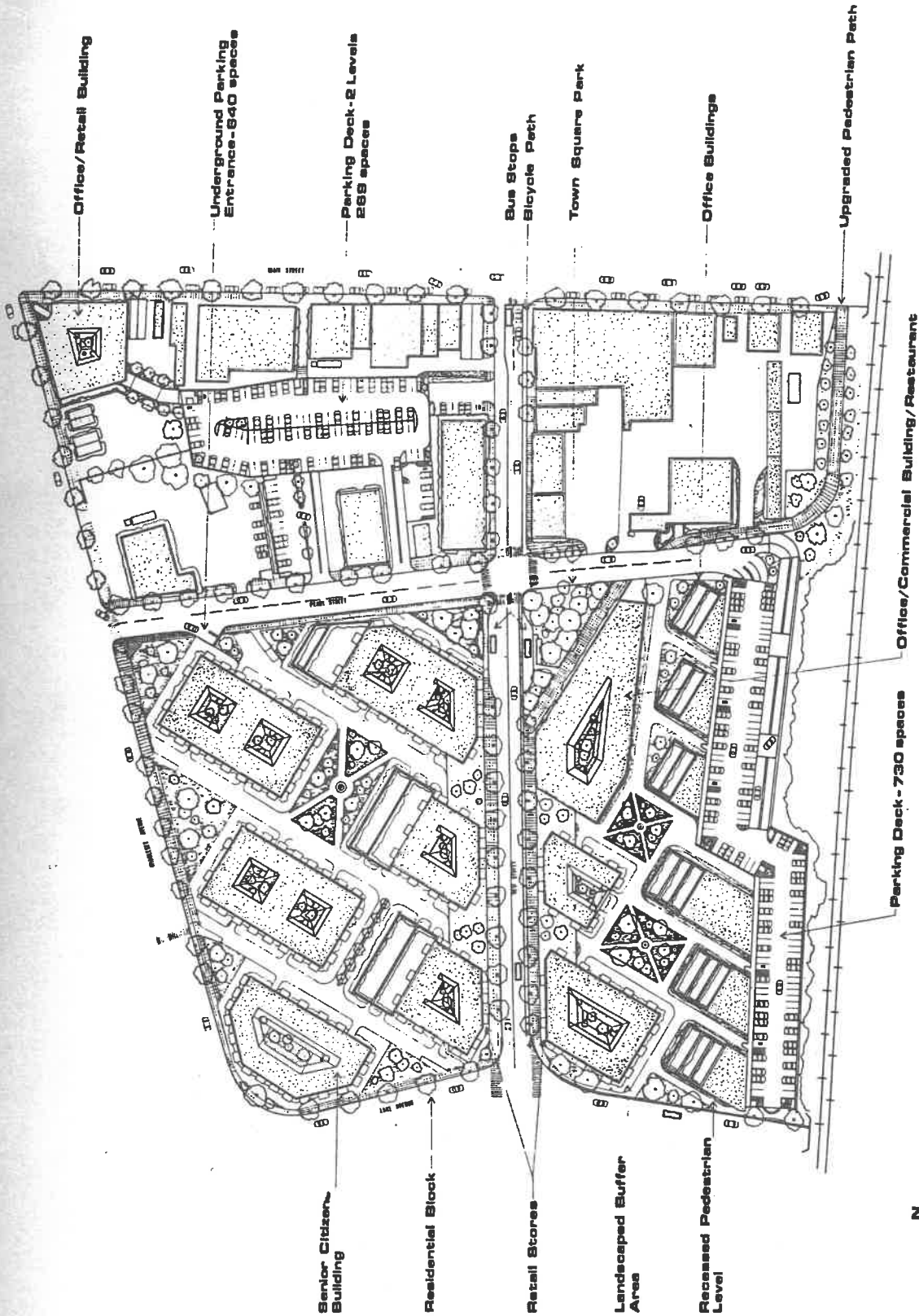


illustrative site plan



PLATE 6

# METUCHEN 2001: TOWN SQUARE DESIGN



Development Scheme IV

Designed by:  
Robert D. Greenberg

PLATE 7

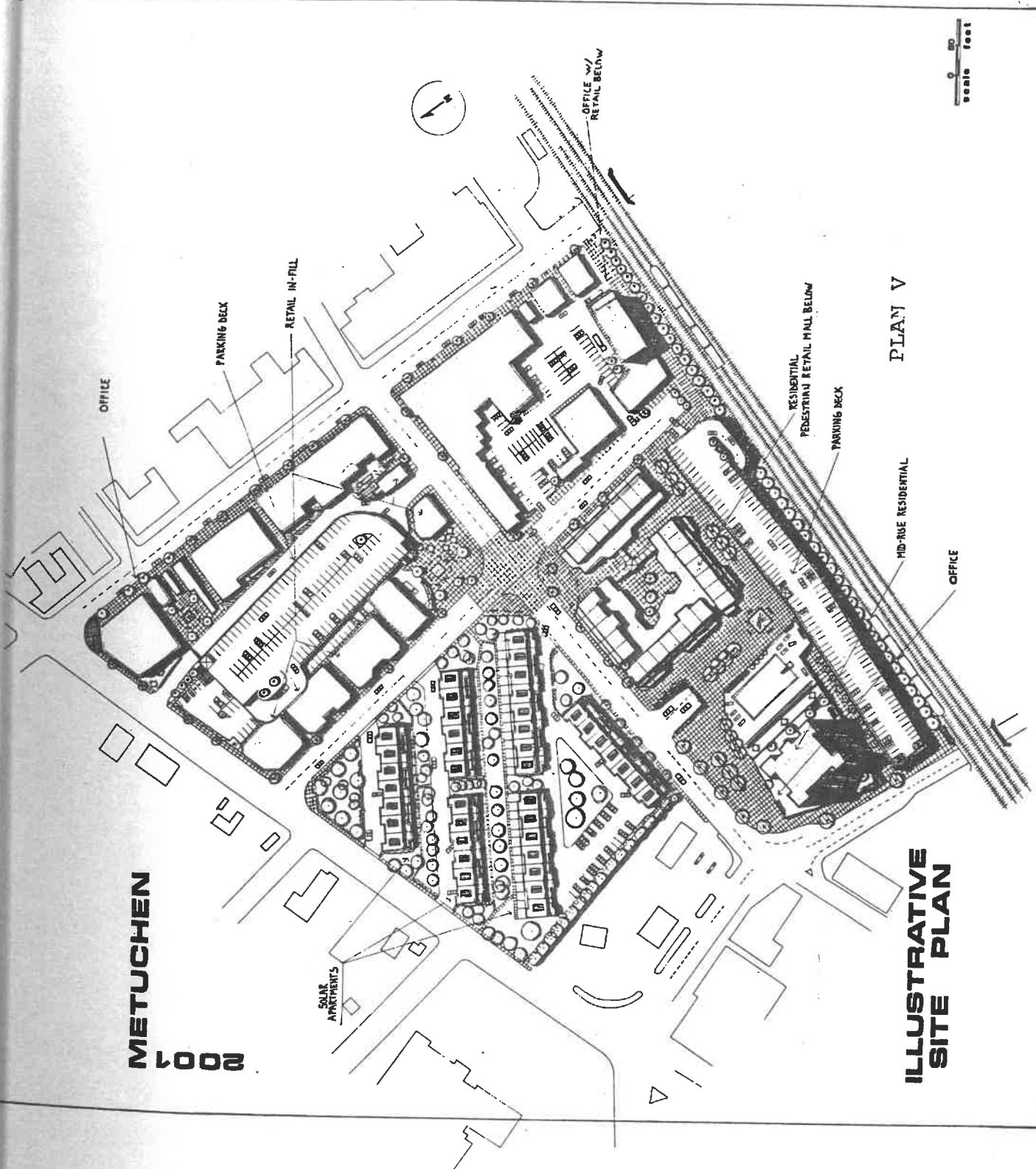
**METUCHEN**  
**2001**

**ILLUSTRATIVE  
SITE PLAN**

**PLAN V**

**PLATE 8**

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infrastructural limitations in a land use plan element. However, that element recommends that vacant and redevelopable parcels be selected for rezoning for residential purposes with an eye to the eventual construction of between 300 and 500 units of new housing of various types and sizes. Specific areas where rezoning should be considered are recommended in the Housing Plan Element to be the northwest quadrant and the central business district. Densities are recommended to be high enough to encourage development but also respect traffic circulation, parking and environmental limitations.

### Fiscal Considerations

In an effort to determine the most productive use of vacant or redevelopable land areas in terms of the municipal fisc, a comparison was made of the equalized valuations per acre of different types of properties which exist in the Borough. Specifically, a condominium/townhouse development, medical offices and a supermarket were compared on a per acre basis to determine the type of use that would yield the highest property tax return and therefore the greatest number of dollars to sustain services in the municipality. In understanding the material presented, it is important to remember that valuations can vary according to the method used, are often subject to judgement on the part of the assessor, and may be highly inaccurate when the difference between the assessed valuation and equalized valuation is pronounced, as it is in the Borough of Metuchen (the County equalization ratio for Metuchen is 56.84).

The Iron Gate Condominiums, constructed at a density of eight (8) units to the acre, have an equalized valuation per acre of \$708,033. A three (3) story office building on Highland Avenue has an equalized valuation of \$2,270,162 per acre. However, it should be noted that the particular office building used in the example occupies virtually its entire lot and provides no parking on-site. If sufficient parking were to be provided to accommodate a building of its size, a lot of roughly one (1) acre would be required, and the equalized valuation per acre would be closer to \$600,000. The Foodtown supermarket has a per acre equalized valuation of \$717,876, not much higher than the Iron Gate Condominiums.

Projected equalized valuations for five different types of uses were developed based upon certain assumptions regarding land and improvement values and the method of taxation. Single-family residential development at six (6) dwelling units per acre was projected to be valued at \$690,000 per acre. Condominium/townhouses at ten (10) dwelling units to the acre were projected to be valued at \$765,000. Condominium flats at sixteen (16) dwelling units per acre were projected to be valued at \$960,000. 21,000 square feet of office space in a three-story building was projected to produce an equalized valuation of as much as \$1,500,000. However, this figure reflects the high construction costs per square foot associated with office space, and this is usually not the method employed in assessing properties used for business purposes. Such properties are more often valued based on the income per square foot produced for the owner. Finally, an acre of land developed with 14,000 square feet of retail space in a two-story building was projected to have an equalized valuation of \$945,000. Again, if the income approach to the valuation of business properties is utilized, this figure would not be valid.

The point of the analysis is that residential development, particularly at higher densities, is competitive with non-residential space in terms of its ability to produce tax revenues for the municipality in order to cover the costs of services.

#### Traffic Considerations

The existing traffic conditions within the Borough of Metuchen are well known to the Borough's residents and to persons who must utilize the Borough's through streets, particularly during peak periods. Traffic has been, and will continue to be a problem. While there are tracts of land within Metuchen which are either undeveloped or underdeveloped, the intensity of existing development makes it impractical, if not impossible, to institute major improvements to the circulation system. Furthermore, the cost of improvements to the road network severely limits the possibility of obtaining adequate funding. Consequently, major changes to the roadway system are not envisioned.



Plate 9 shows the roadway network within Metuchen by jurisdiction. As can be seen from the map, the roadways within the Borough are owned and maintained by the State of New Jersey, the County of Middlesex, and the Borough of Metuchen. Of the roadways within the Borough, 2.32 miles are under the jurisdiction of the New Jersey Department of Transportation (including both federally funded and non-funded roads), and 4.69 miles are under the jurisdiction of Middlesex County.

Plate 10 classifies the roadways within the Borough by function. The classifications used are principal arterial, secondary arterial, principal collector, secondary collector, and local. I-287 is classified as a principal arterial. Secondary arterials include Middlesex - Lake - Essex - Avenues (New Jersey Route 27), Amboy Avenue, New Durham Road, Central Avenue, and Main Street south of Middlesex Avenue. New Jersey Route 27 bisects the Borough of Metuchen on a generally southwest-northeast axis and carries high volumes of through-traffic. Main Street, Amboy Avenue, Central Avenue and New Durham Road also carry significant volumes of local and through traffic. Collector roads include Main Street north of Middlesex, Plainfield Avenue between Central and Main, Durham Avenue, Lake Avenue south of Essex, High Street, and Woodbridge and Grove Avenues.

The railroad rights-of-way bisecting Metuchen have a significant impact upon the flow of traffic through the Borough. This is evident on the preceding plates. Conrail's main line runs northeast to southwest through Metuchen. In addition, Conrail's Perth Amboy Branch cuts through Metuchen from its northwest corner to the southeast corner, and the Conrail Port Reading branch crosses Metuchen parallel to the Borough's northern boundary line. These three railroads, in addition to the various connecting branches within Metuchen, interrupt traffic patterns by funneling vehicles through a limited number of rail crossings. An example of the impact of these rail lines on traffic movement can be seen when Middlesex Avenue is examined. While the Middlesex Avenue right-of-way line proceeds directly through Metuchen, it is interrupted by Conrail's main line in the southwestern sector of the Borough. Consequently, Route 27 is diverted south onto Lake Avenue and then west onto Essex Avenue before rejoining the alignment of Middlesex Avenue at the Metuchen-Edison Township municipal boundary.

As in many older communities, the road system as it developed over the preceding centuries did not reflect today's dependence upon the private automobile, and, consequently, rights-of-way and the roadways themselves are not designed for the high volumes of traffic that occur today. The road network is constrained by railroad crossings, offset intersections, insufficient roadway widths for the volume of traffic required to be carried, and limited potential for improvement.

Over the years, a number of possible traffic circulation improvements have been investigated by and within the Borough of Metuchen. In the 1970's, as part of the Middlesex County TOPICS Program, a number of intersection improvements were planned within the Borough. For the most part, these improvements have been implemented and have resulted in an improvement in traffic circulation. A number of years ago, the New Jersey Department of Transportation designed a solution to the Route 27/Conrail problem, described above, which would have allowed traffic to continue directly through on Middlesex Avenue, removing the need to use Essex and Lake Avenues to cross the railroad. However, practical difficulties apparently prevented that improvement from being made at the time it was designed. At this point, the probability of such an improvement being made is hampered by funding as well as practical limitations. The desirability of this major improvement to the Borough's traffic circulation system still exists, however, despite the implementation difficulties. Consequently, the Borough should assume a pro-active posture in urging the State to continue to consider, and ultimately implement, such a plan.

The location of the existing interchanges with Route 287 pose another problem for Borough residents, particularly in the northwest quadrant of Metuchen. Traffic flowing between South Plainfield and the Route 287 interchange with Route 27 in Edison uses residential streets in Metuchen, especially John Street, to bypass the Middlesex/Central Avenue intersection. A draft study has been prepared for the New Jersey Department of Transportation by the traffic engineering firm of Garmen Associates in which the feasibility of constructing a new full interchange with Route 287 at Talmadge Road in Edison Township is evaluated. This proposal, which is conceptual at this point,

BOROUGH OF METUCHEN  
Middlesex County, New Jersey

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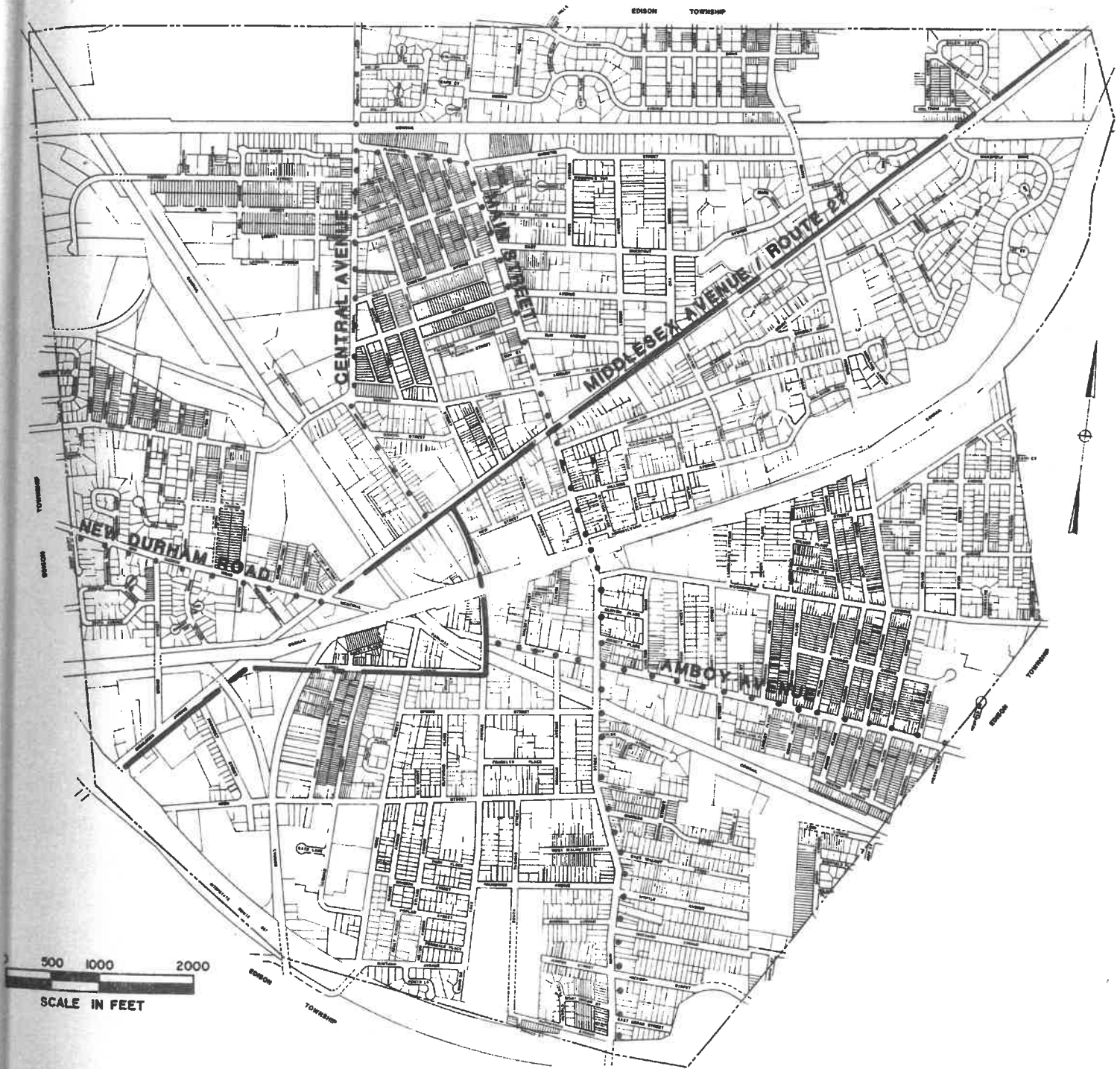


PLATE 9

**Road Jurisdiction Map**

COUNTY ROAD    . . . . .  
STATE ROAD    ————

BOROUGH OF METUCHEN  
Middlesex County, New Jersey

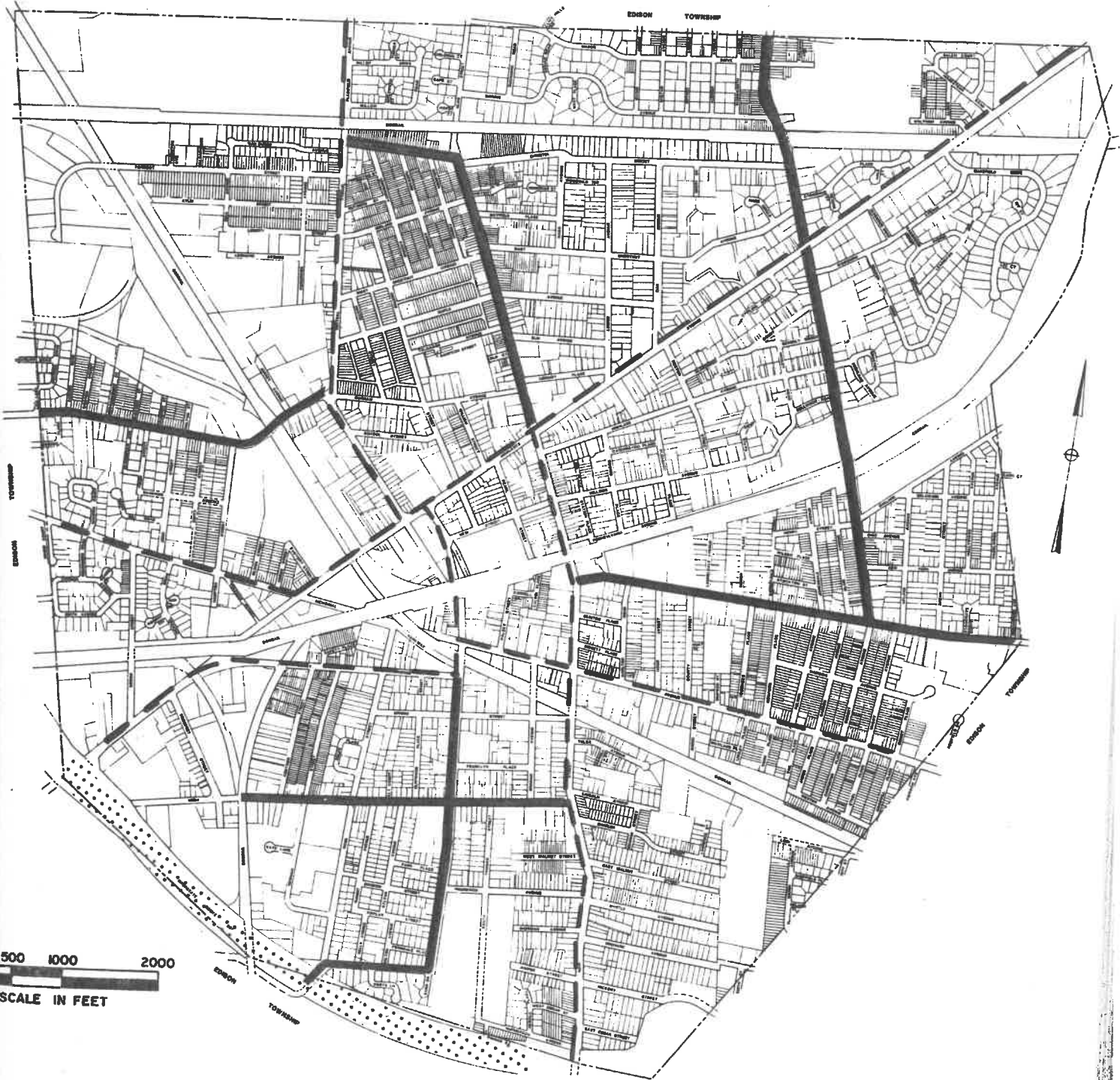


PLATE 10

**Functional Classification**

-  PRIMARY ARTERIAL
-  SECONDARY ARTERIAL
-  COLLECTOR

would realign Talmadge Road to the east and eliminate the existing partial interchange at New Durham Road. If the Talmadge Road interchange proposal were to be implemented, there would be an improvement in local traffic conditions, since a direct link would be created between Route 287 and employment centers in Edison and South Plainfield. Thus, the construction of such an interchange is endorsed. Meanwhile, the Planning Board maintains its position that a full interchange should be constructed between Route 27 and Interstate 287, since it is felt that such an improvement would significantly reduce traffic congestion within Metuchen.

As indicated previously, the roadway system within the Borough is characterized by significant traffic volumes and, during various times of the day (both peak and off peak hours), by congestion. The congestion experienced is a result of the total volume of traffic on the roadways, the disjointed roadway network, and ingress and egress activity resulting from existing land uses along the roads.

Land development and the traffic associated with that development are obviously interrelated. Any new development in Metuchen is going to have an impact on traffic, and that impact will be unquestionably negative. If it is improbable that major improvements can be made to the road system to increase the capacity of the roadways and improve traffic operations, then Borough officials must recognize that they are making a conscious decision to increase the traffic and congestion already experienced. Therefore, in evaluating development alternatives for Metuchen's vacant and redevelopable land areas, particularly but not only in the central business district, the traffic issue becomes a question of how much additional inconvenience Borough residents would be willing to endure.

Traffic impacts per acre for various land use types were projected as part of this study. They are summarized in tabular form on the succeeding page.

<u>Land Use Type</u>	<u>Gross Density/ Floor Area</u>	<u>Total Trip Ends</u>	<u>AM Peak</u>	<u>PM Peak</u>
Res./S.F.	6 D.U./Acre	60	6	7
Res./Condo-Townhouse	10 D.U./Acre	51	6	6
Res./Condo-Flat	16 D.U./Acre	86	8	10
Office (3 story)	21,000 sq. ft.	258	25	34
Retail (2 story)	14,000 sq. ft.	1610	28	202

Clearly, residential development, even at relatively high densities, would have a far lesser impact on traffic circulation within the Borough than both kinds of non-residential development, particularly retail development. Moreover, it is interesting to note that an increase in residential densities does not markedly affect peak hour traffic impacts.

Metuchen's development over time was accelerated because of the numerous rail facilities existing within the Borough. Despite the steady reduction in rail passenger service experienced on a national and regional basis, Metuchen residents continue to benefit from the the Borough's location with respect to rail transit. The advantages of proximity to rail transit within the Borough are offset by certain disadvantages. First, as previously mentioned, the railroad rights-of-way which transect the Borough have adversely affected traffic circulation. Second, the need to provide parking for rail commuters has resulted in the significant commitment of acreage in the downtown area to parking lots. Nevertheless, the local and regional need for this parking exists and will continue, and quite probably increase, in the future.

#### Parking Considerations

The Metuchen 2001 Study referred to previously contains information on parking facilities within the Borough of Metuchen. While this information offers a generalized picture of available parking within the Borough, it does not relate parking demand to the number of spaces available, nor does it address the convenience of the existing parking supply.

Table 2 gives the theoretical parking demand in each of eleven study areas within the Borough of Metuchen. Plate 11 illustrates the parking study areas. In computing the demand, one (1) space was used for each 250 square feet of gross retail space and 350 square feet of gross office space. While many retail uses actually require more parking, the study did not examine each specific use, and the ratio of one (1) space for every 250 square feet was felt to adequately represent the overall demand. Table 3 summarizes the available parking by study area and indicates whether those spaces are located on or off street. Commuter parking provided by the Parking Authority is not included in the figures shown. Table 4 compares the theoretical parking demand and the available supply. Table 5 groups the study areas according to location: east side of Main Street, west side of Main Street and south of the railroad line, in order to evaluate deficiencies within those areas.

TABLE 2  
PARKING DEMAND BY STUDY AREA

<u>Study Area</u>	<u>Retail</u>	<u>Office</u>	<u>Total</u>
1	120	72	192
2	123	61	184
3	136	68	204
4	164	109	273
5	99	39	138
6	63	7	70
7	198	29	227
8	69	43	112
9	26	0	26
10	148	3	151
11	47	100	147
<b>TOTAL</b>	<b>1193</b>	<b>531</b>	<b>1724</b>



BOROUGH OF METUCHEN  
Middlesex County, New Jersey

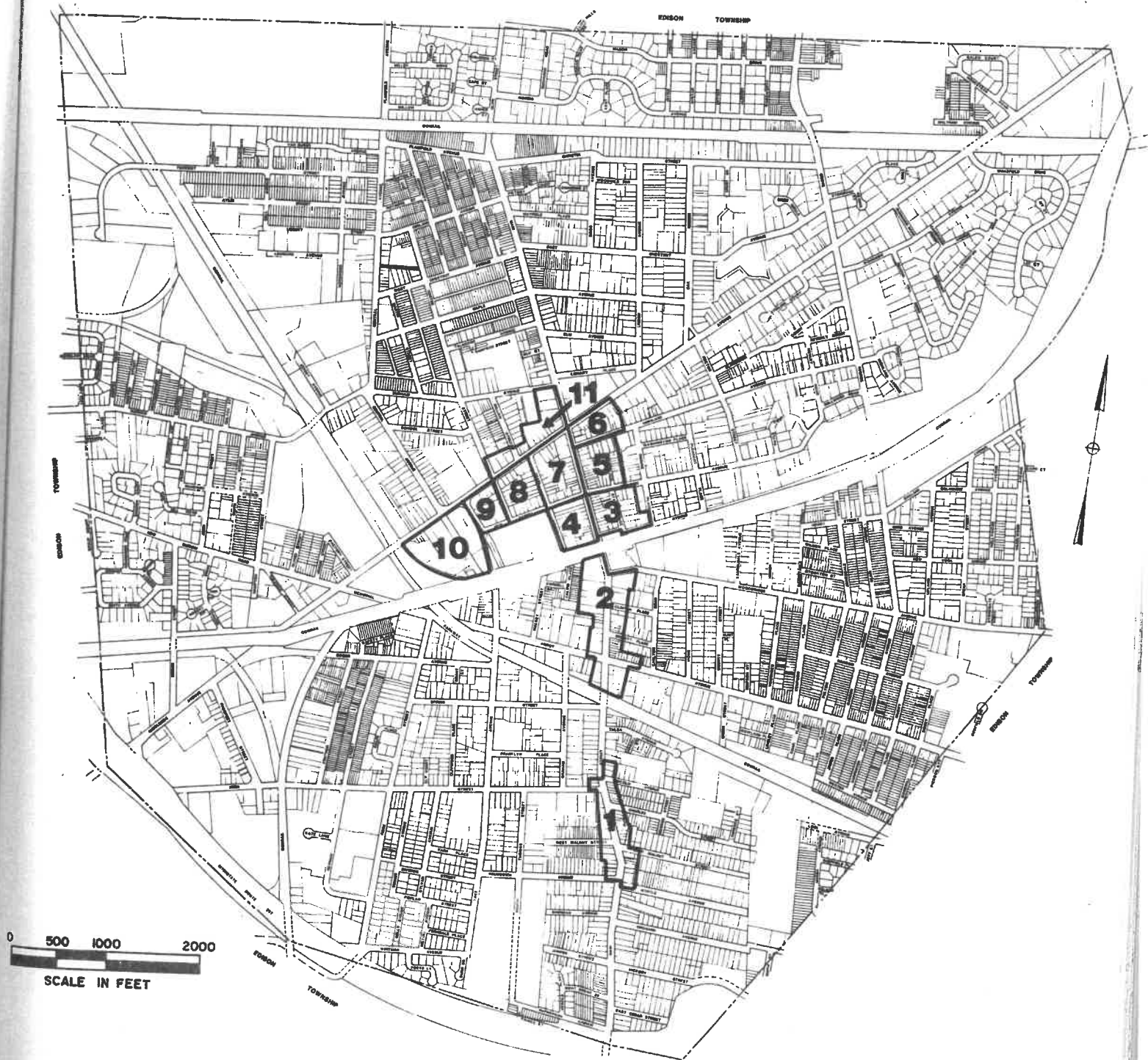


PLATE 11  
**Parking Study  
Analysis Zones**

TABLE 3

## PARKING SUPPLY BY STUDY AREA

<u>Study Area</u>	<u>On Street Spaces</u>	<u>Off Street Spaces</u>	<u>Total Spaces</u>
1	82	35	117
2	96	96	196
3	27	47	74
4	29	43	72
5	24	111	135
6	18	16	34
7	47	170	217
8	40	139	179
9	18	-0-	18
10	-0-	228	228
11	-0-	117	117
TOTAL	<u>381</u>	<u>1002</u>	<u>1383</u>

TABLE 4  
 PARKING DEMAND VS. SUPPLY  
 BY STUDY AREA

<u>Study Area</u>	<u>Parking Demand</u>	<u>Available Spaces</u>
1	192	117
2	184	192
3	204	74
4	173	72
5	183	135
6	70	34
7	227	217
8	112	179
9	26	18
10	151	228
11	147	117
<b>TOTAL</b>	<b>1724</b>	<b>1383</b>

TABLE 5

PARKING DEMAND VS. SUPPLY  
MAIN STREET STUDY AREA

<u>Study Area</u>	<u>Parking Demand</u>	<u>Available Spaces</u>	<u>Deficiency</u>
East Side			
3	204	74	-130
5	138	135	- 3
6	70	34	- 36
TOTAL	<u>412</u>	<u>243</u>	<u>-169</u>
West Side			
4	273	72	-201
7	227	217	- 10
TOTAL	<u>500</u>	<u>289</u>	<u>-211</u>
South of RR			
1	192	117	- 75
2	184	192	+ 8
TOTAL	<u>376</u>	<u>309</u>	<u>- 67</u>

While parking is a problem in Metuchen, the actual conditions are not as severe as the analysis indicates, especially along Main Street. To some extent, this is a reflection of the current volume of retail business. If business activity increased, the parking problem would increase, possibly to the theoretical levels indicated by this study.

An analysis of the data presented yields several conclusions. First, as indicated in the Metuchen 2001 Study, and reproduced on Table 6, in excess of 1,000 spaces of commuter parking exists. While a majority of these spaces are apparently used by non-residents, it is difficult to envision the elimination of a significant number of them or the revenues they produce for the Parking Authority. The second conclusion is that parking for the retail area along Main Street between the railroad and Middlesex Avenue is inadequate. While additional retail development in the downtown may appear to be desirable, the resulting parking demand will intensify existing problems. Finally, the current total parking deficiency in the blocks west of Main Street, which is the area of the central business district identified in the Metuchen 2001 Study as having the greatest potential for redevelopment, totals 211 spaces. Redevelopment of this area would eliminate the Parking Authority's Pearl Street lot and would also generate its own parking demand. Thus, a major consideration would be how to provide sufficient parking to meet the existing deficiency and the anticipated demand and continue to provide for local and regional commuter parking needs.

For comparative purposes, the parking demand generation rates for various types of land uses were compared on a per-acre basis. These are presented below:

<u>Land Use</u> <u>Type</u>	<u>Density</u> <u>Floor Area</u>	<u>Parking</u> <u>Ratio</u>	<u>Parking</u> <u>Demand</u>
Res./S.F.	6 D.U./Acre	2.0/Unit	12 Spaces
Res./Condo-Townhouse	10 D.U./Acre	2.0/Unit	20 Spaces
Res./Condo-Flat	16 D.U./Acre	2.0/Unit	32 Spaces
Office	21,000 sq. ft.	1.0/300 sq. ft.	70 Spaces
Retail	14,000 sq. ft.	1.0/200 sq. ft.	70 Spaces

TABLE 6

## PARKING AUTHORITY LOTS \*

	<u>Sticker</u>	<u>Meters</u>	<u>Total</u>
Halsey Street	118	82	200
New Street	49	60	109
Pearl Street	251	274	525
Station Place	14	23	43
Penn Plaza	--	103	103
Penn Avenue	--	75	75

\* There is an additional Parking Authority lot located on South Main Street between West Walnut and High Streets which was not listed in the Metuchen 2001 Study. It does not serve commuters.

Source: Metuchen 2001 Study, Rutgers Urban Design Studio, 1979-1980

The residential parking need projections assume a two-space per unit standard, and thus the requirement appears to increase directly with the number of dwelling units. However, smaller dwelling units may not demand as many as two (2) spaces per unit, particularly considering Metuchen's location with respect to the railroad station. Summarily residential development at densities of up to thirty-four (34) units per acre would require the creation of fewer parking spaces to service it than would either retail or office use.

Any redevelopment of the downtown which would involve the Pearl Street parking lot would require the cooperation of the Parking Authority in its willingness: a) to make the parcel available for development and b) to invest in replacement parking elsewhere in the downtown area within reasonable proximity to the railroad station. Because of the scarcity of land in the central business district, the construction of a deck may be necessary. While decks are not, in and of themselves, economical to construct, it is conceivable that the Parking Authority could carry the additional cost of providing the deck if recent and anticipated increases in parking revenues were sufficient to offset that cost. Essentially, the Parking Authority would need to determine if it could absorb the cost of creating the deck and still be responsible to its bondholders. The potential for utilizing a deck approach to meeting existing and future parking requirements is critical in planning for any significant redevelopment of Metuchen's downtown.

## GOALS AND OBJECTIVES

The 1967 Master Plan for the Borough of Metuchen, prepared by Candeub, Fleissig and Associates espoused a number of policies which were endorsed in the 1976 Amendment to the Master Plan and, with minor modifications, remain valid in 1982:

- \* To provide a variety of housing types to serve the residents of the Borough.
- \* To preserve and enhance the residential character of the Borough.
- \* To maintain the Borough's physical and visual identity in the region.
- \* To improve the competitive position of Metuchen's downtown area.
- \* To encourage new industrial development, but not at the cost of blighting residential areas.
- \* To improve the efficiency of the major street network in Metuchen.
- \* To provide quick and convenient access to the downtown area for the people who desire to use the facilities of the business district.
- \* To develop and sustain a compact, efficient, and viable shopping area within the central business district.
- \* To improve the overall appearance of the business district.
- \* To provide a circulation system which brings into balance the needs of the pedestrian and the needs of cars, trucks, and buses.

While the specific strategies for promoting these policies have been refined over the past fifteen (15) years as some of the original (1967) recommendations have been implemented and others have needed to be modified, the overall goals for the Borough have remained essentially the same.



These policies with respect to land use and development are consistent with the fourteen (14) Purposes set forth in the Municipal Land Use Law:

- a. To encourage municipal action to guide the appropriate use or development of all lands in this State, in a manner which will promote the public health, safety, morals and general welfare.
- b. To secure safety from fire, flood, panic and other natural and manmade disasters;
- c. To provide adequate light, air and open space;
- d. To ensure that the development of individual municipalities does not conflict with the development and general welfare of neighboring municipalities, the County and the State as a whole;
- e. To promote the establishment of appropriate population densities and concentrations that will contribute to the well-being of persons, neighborhoods, communities and regions and preservation of the environment;
- f. To encourage the appropriate and efficient expenditure of public funds by the coordination of public development with land use policies;
- g. To provide sufficient space in appropriate locations for a variety of agricultural, residential, recreational, commercial and industrial uses and open space, both public and private, according to their respective environmental requirements in order to meet the needs of all New Jersey citizens;
- h. To encourage the location and design of transportation routes which will promote the free flow of traffic while discouraging location of such facilities and routes which result in congestion or blight;

- i. To promote a desirable visual environment through creative development techniques and good civic design and arrangements;
- j. To promote the conservation of open space and valuable natural resources and to prevent urban sprawl and degradation of the environment through improper use of land;
- k. To encourage planned unit developments which incorporate the best features of design and relate the type, design and layout of residential, commercial, industrial and recreational development to the particular site;
- l. To encourage senior citizen community housing construction;
- m. To encourage coordination of the various public and private procedures and activities shaping land development with a view of lessening the cost of such development and to the more efficient use of land; and
- n. To promote the conservation of energy through the use of planning practices designed to reduce energy consumption and to provide for maximum utilization of renewable energy sources.

In a developed municipality such as Metuchen, the principal goal is one of preservation: preservation of the Borough's essentially residential character, of the integrity of its neighborhoods, of the viability of its central business district, of levels of municipal services, of fiscal stability and, ultimately, of its desirability as a community in which to live. Maintaining service levels while preserving a community's desirability as a place to live generally requires an expanding tax base, so that consistent levels of service can be provided without creating an unreasonable property tax burden. However, Metuchen has little vacant land which is suitable for new development. In addition, traffic and parking problems exist and inhibit the ability of the community to absorb new development and redevelopment.

Thus, achieving the preservation goal outlined above necessitates compromise in both the magnitude of what is sought and the balance among the components of the preservation goal. The following objectives have guided the selection of the land use policies expressed in the Land Use Plan Element:

1. Although it is recognized that traffic and parking problems already exist in Metuchen, any development or redevelopment of the central business district should not intensify traffic problems beyond acceptable levels and should be undertaken only in conjunction with the provision of adequate parking.
2. Land uses to be encouraged in any development or redevelopment strategy should be appropriate to the area in which they are proposed, should represent an economic benefit to the community, and should serve a valid market to ensure the likelihood of their realization.
3. Areas of environmental sensitivity, such as flood plain areas, should be protected from development, but surrounding land uses should be planned to ensure maximum public benefit from the resultant open space.
4. Opportunities to meet the housing needs of Metuchen's residents and work force, such as those outlined in the Housing Plan Element, should be encouraged. In addition, housing should be considered as a means of creating an expanding market for existing businesses in Metuchen.

## THE LAND USE PLAN

### Introduction

Plate 12 presents the Land Use Plan for the Borough of Metuchen. The Land Use Plan has been drawn in an effort to implement the goals and objectives set forth in the preceding section of this element. Specifically, it has attempted to balance the desirability of new development within the Borough's central business district and the northwest quadrant against considerations of traffic and parking impacts, a concern for the costs of providing public services, considerations of environmentally sensitive areas, particularly the floodplain of Dismal Brook, and housing needs. Finally, an overriding concern of the plan is the preservation of Metuchen's essentially residential character.

In general, Metuchen is a developed community with few opportunities for extensive changes in land use policy. The target areas for the Land Use Plan are two. The northwest quadrant of the Borough has been zoned for industrial uses but has not attracted extensive or desirable development. It abuts residential areas which have been adversely affected by the visual impact of those businesses which do exist. The central business district was the subject of the Metuchen 2001 Study and is of particular concern to Borough officials because of the potential for redevelopment in certain areas and the downtown's significance with respect to the established character of the Borough, as well as the desirability of protecting the viability of Metuchen's Main Street as a place of business. Redevelopment proposals described in the text are numbered to correspond with the numbers used on Plate 12, for clarity.

The Land Use Plan for Metuchen recommends the continuation of current land use planning policies in the existing residential areas of the Borough. However, it is suggested that the Zoning Ordinance be amended to eliminate the "cumulative zoning" approach now in effect. The term "cumulative zoning" means, for example, that in a multi-family residential district, single-family residences are permitted to be constructed, since, in each district listed in the Ordinance, all of the less intensive uses permitted in the previously listed districts are permitted, usually by reference. While in some specific

instances, such an approach may be desirable, it generally increases the potential for future land use conflicts.

The treatment of less intensive uses in zones designed for more intensive uses should normally be limited to providing relief for existing uses, unless for planning purposes a mixture is specifically deemed to be desirable in a particular zone.

#### Residential Development - Northwest Quadrant (Proposals 1, 2 and 3)

In the northwest quadrant, two areas are recommended to be rezoned for attached or semi-detached single-family residential development. One area is owned by Gulton Industries; the other is located north of the Oakite Plant and fronts on Durham Avenue and Hampton Street. Additional areas recommended for such rezoning encompass both vacant and developed parcels on dead-end streets located north of Durham Avenue and south of the vacant portion of the Gulton property as well as developed properties to the east of Conrail. These additional areas could potentially be infilled and/or redeveloped, although the acquisition of a number of parcels and the razing of existing buildings would be involved.

The residential development proposals for the northwest quadrant encompass certain properties now used for industrial purposes. It is not the intent of the Land Use Plan to make it difficult for viable industries to continue to function in Metuchen, and it is not recommended that the industrial zoning currently applicable to existing industrial buildings be changed at this time. Rather, it is the purpose of the recommendations to offer alternative uses of land if and when it is no longer needed for industrial purposes. Such land, if redeveloped as proposed, could enhance existing residential neighborhoods and provide needed housing. Some sort of redevelopment "overlay" zoning would be one possible approach to the treatment of these areas. Another would be to wait until the appropriate time to rezone the properties based upon the health of the existing industrial activity or the transfer of ownership of a property.

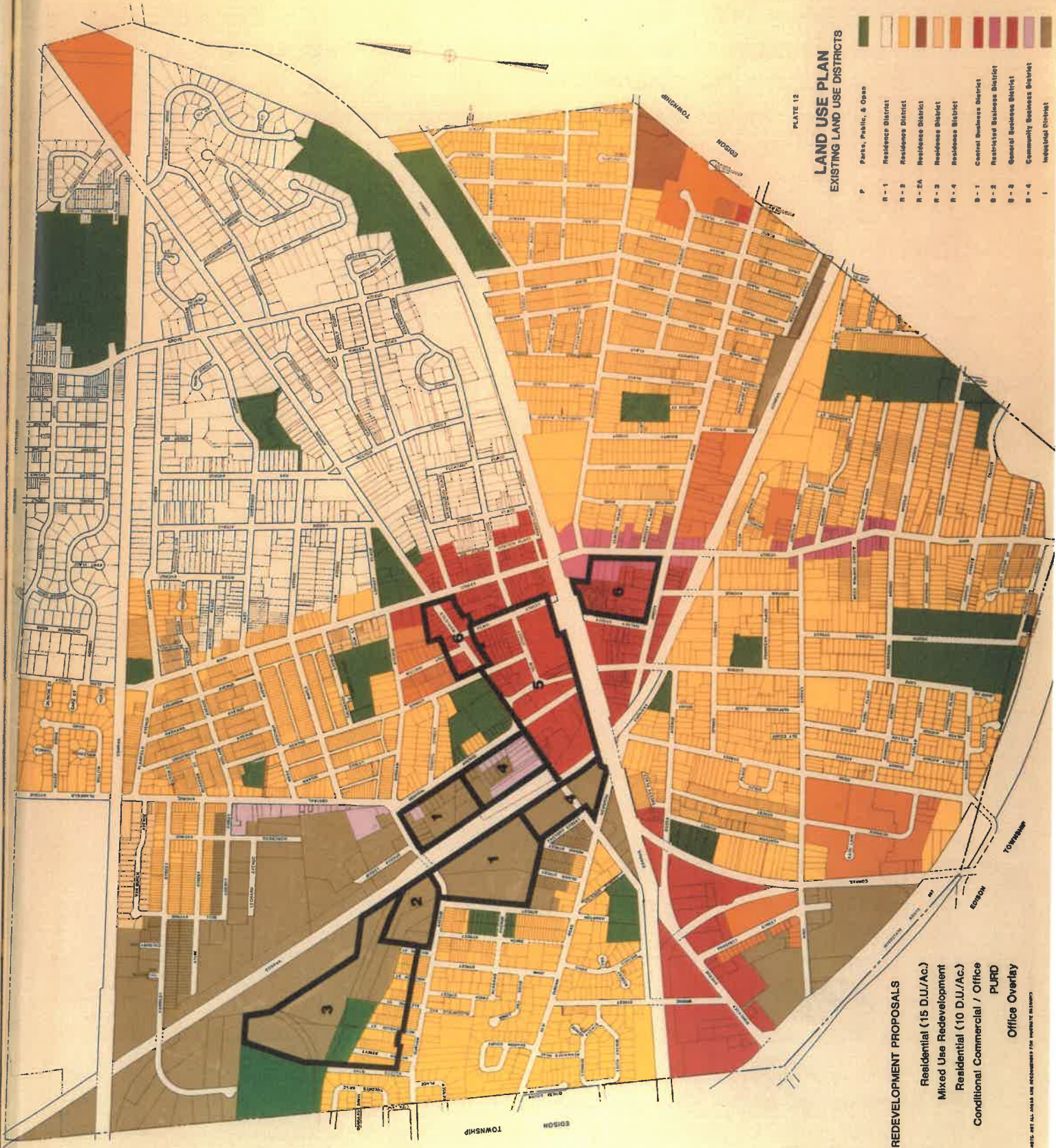


PLATE 12

**LAND USE PLAN  
EXISTING LAND USE DISTRICTS**

P	Parks, Public, & Open
R-1	Residence District
R-2	Residence District
R-2A	Residence District
R-3	Residence District
R-4	Residence District
B-1	Central Business District
B-2	Restricted Business District
B-3	General Business District
B-4	Community Business District
I	Industrial District

**REDEVELOPMENT PROPOSALS**

- 1 Residential (15 D.U./Ac.)
- 2 Mixed Use Redevelopment
- 3 Residential (10 D.U./Ac.)
- 4 Conditional Commercial / Office
- 5 PURD
- 6 Office Overlay

NOTE: NOT ALL LAND USE DISTRICTS ARE SHOWN ON THIS MAP

Proposal 1  
South Side of Durham Avenue

Residential development of the parcels lying south of Durham Avenue will necessitate the creation of berms and extensive landscaping to screen out the nearby industrial and commercial activities. Obtaining such amenities from a developer at the time of development is best accomplished through the site plan review and approval process. Forms of development other than detached single family homes, such as twin houses, townhouses, patio houses, or zero lot line development, all involve the preparation of a comprehensive scheme for an entire tract, would require site plan approval, and are therefore preferable to development with detached dwellings on individual lots, which would not involve a site plan. The ultimate densities of development permitted in the areas south of Durham Avenue should be related to the costs of providing the necessary berms (man-made earthen mounds, generally four (4) to six (6) feet high and landscaped; used where extensive screening is desired) and other amenities; but densities should not exceed fifteen (15) dwellings per acre to retain reasonable compatibility with existing residential development in the area.

Proposals 2 and 3  
North Side of Durham Avenue

The area lying north of Durham Avenue, which includes the Gulton Industries site, portions of the Dismal Brook flood plain, and some vacant and some underdeveloped parcels along Houston, Electric, Weston and Westinghouse Streets, should be redeveloped in a comprehensive manner which would ensure compatibility with the residential character of the area, keep structures out of the flood plain while improving it as an open space buffer, and permit adaptive re-use of the Gulton Industries building, if feasible. Two separate zones are recommended for this area. The developed portion of the Gulton Industries tract, which is in active industrial/office use, should remain zoned for industrial purposes for the time being with the understanding that a long-range plan for the ultimate use of the site should be established. Such a plan could involve the creative adaptation of the existing industrial structure to accommodate a combination of small residential units and limited non-residential activities, such as professional offices or convenience retail

uses. However, in the interests of maintaining the viability of the central business district, extensive non-residential development, particularly with uses which are competitive with those permitted along Main Street, should not be encouraged.

The type of development advocated for the remaining area is attached or semi-attached dwellings. The net density of development in the area should be approximately ten (10) dwellings per acre, although it could be higher, depending upon the sizes of the units. Gross densities should be low enough to ensure that, when structures are clustered into the area south of the railroad spur right-of-way and outside of the flood plain, the resultant net density has an impervious surface coverage and scale appropriate to the adjacent neighborhood. The specific density of development ultimately assigned to this area should be determined by the Borough Council at the time the Zoning Ordinance is amended based upon considerations of whether or not the open space will be accessible to the surrounding neighborhood or will only benefit new residents; the types and costs of improvements which will be necessary to make the tract developable, such as removal of the cable TV antenna and other non-residential structures and improvement of the stream and surrounding road network; the sizes and types of units proposed; and the compatibility of the overall development proposed with the adjacent neighborhood.

Except for the infill of individual lots, no development in this area should involve fewer than five (5) contiguous acres, and larger tracts are preferred. The zoning should provide sufficient flexibility to allow existing detached single-family residences to be enlarged and to permit the infill of vacant lots with attached or detached dwellings as appropriate.

As part of the master plan review process, a few other sites north of Durham Avenue were also considered for redevelopment with residential uses, notably the Lawler tract and the area north of the Borough garage. Site improvement costs, aesthetic considerations, and the fact that the Lawler tract may still have some potential for industrial development, were deterrents to including these areas in the redevelopment proposals. The Municipal Land Use Law mandates the periodic reexamination of a municipality's master plan and



development regulations at least every six (6) years. It is suggested that the whole northwest quadrant be evaluated again in 1989, or before, to determine if there are other sites appropriate for residential use.

#### Non-residential Development - Northwest Quadrant (Proposal 4)

An area of the northwest quadrant which is bounded by Central Avenue to the east and Middlesex Avenue to the south is recommended to be redeveloped for commercial/office space under certain conditions. Conditions to be met would necessarily include acquisition of access to Central Avenue so that traffic could be routed out Durham Avenue to minimize the impact on Middlesex Avenue. This is of particular importance if office development takes place, since the peak hour for traffic generated by that use would occur simultaneously with peak-hour traffic flows on Middlesex Avenue. Such office development should be limited to professional uses in moderately sized buildings. Commercial development should not include those uses which are permitted in the central business district, with a few exceptions (banks, restaurants). Supermarkets and variety stores are specifically discouraged.

Should the Oakite property ever terminate as an industrial site, the southern portion and the parking area opposite, on the south side of Middlesex Avenue, should be redeveloped for commercial/office purposes. However, it is not recommended that a rezoning from industrial to commercial/office occur now; when it becomes appropriate to rezone these parcels, the range of uses permitted should be carefully selected to ensure that traffic impacts will be minimal, especially at peak hours.

#### Central Business District (C.B.D.) (Proposals 5 and 6)

Recommendations for changes in the central business district are intended to encompass the blocks lying south of Middlesex Avenue, north and east of the juncture of the Conrail railroad lines, and west of the rear lot lines of lots fronting on Main Street. Although, clearly the lots fronting on both sides of Main Street are part of the central business district, no dramatic changes are proposed for the treatment of this corridor. Moreover, while Plate 3 of this document shows a central business district extending east of Main Street, north of Middlesex Avenue, and south of the Conrail main line (designated in

the 1967 Master Plan by Candeb, Fleissig Associates), this Land Use Plan Element advocates a different treatment of the excluded areas from that advocated for the more limited central business district area defined in this paragraph.

In the central business district, it is recommended that redevelopment of the four (4) block area bounded by Pearl Street, Middlesex Avenue, and the juncture of the railroad lines be considered.

In all probability, Metuchen cannot anticipate drawing major office complexes; there are other locations for such uses within the region which are more visible and accessible and therefore more attractive to relocating firms. Moreover, if speculative office construction should resume in the future, it would most likely cluster around existing major office developments. Nevertheless, Metuchen should provide for some professional office development opportunities since such uses serve a residential population. The current zoning in the Borough's various business districts permits offices, yet new office development has not occurred in the downtown.

Further retail development in Metuchen is inadvisable unless the resident population increases. If new retail activities were to be introduced through redevelopment of peripheral areas, they could, unless carefully restricted as to type of use, draw shoppers away from the Main Street stores, the core of Metuchen's central business district. The promotion of the viability of the downtown area is as important to the preservation of the Borough's character as is the protection of its residential neighborhoods. Moreover, the potential traffic impacts from, and the parking requirements for, extensive retail development could be overwhelming to the downtown.

It is therefore recommended that new multi-family or attached single-family residential development occur in the delineated redevelopment area, but that a mix of uses be permitted which would include some professional office space and selected retail uses. This type of development is defined in the Municipal Land Use Law (N.J.S.A. 40:55D - 1 et seq.) as planned unit residential development. As emphasized in an earlier section of this document dealing with Parking Considerations, the effectuation of the planned unit residential development redevelopment proposal may depend upon the Parking Authority's willingness and ability to relocate or eliminate some of the

commuter parking spaces on the Pearl Street lot so that block can be available for redevelopment. However, there is no intent to jeopardize either the Parking Authority's obligation to its bondholders or the Borough's responsibility to provide for some amount of commuter parking within reasonable proximity to the railroad station.

The zoning should provide the opportunity for planned unit residential development in the C. B. D. incorporating sufficient flexibility to allow a developer to respond to market considerations in terms of the precise mix of uses and types and sizes of dwelling units. Under no circumstances should such redevelopment occur unless adequate parking can be provided. The density of development on the site will have to depend, to a large extent, on the ultimate mix of land uses created by the developer, since that will affect the parking requirements which will, in turn, affect the total amount of development which can occur.

Redevelopment in the C. B. D. with planned unit residential development should not occur unless five (5) or more acres of land can be assembled. This is the statutory minimum acreage for planned unit residential development set forth in the Municipal Land Use Law and is a reasonable minimum to justify costly site improvements and amenities. Strict design controls, including parking standards, should be adopted by the Mayor and Council as part of an amended Zoning Ordinance to promote public health and safety and also encourage a visually pleasing development. The scale of any new development should be compatible with that which already exists in the downtown. The developer should be encouraged to orient structures for solar energy use, to the extent possible, and, in siting structures, should attempt to buffer residential uses from the noise of the railroad through such techniques as non-residential building mass and noise barriers along the railroad and placement of residential units at some distance from the railroad line can be used to mitigate the condition.

If residential redevelopment cannot be achieved, the expansion of commuter parking areas and concomitant streetscape improvements (landscaping, pedestrian amenities) should be considered. Parcels of less than five (5) acres in size are intended to continue to be utilized for retail, office, and service activities as permitted under the current zoning. However, the zoning map should be amended to ensure that new retail development or redevelopment

is confined to properties south of Middlesex Avenue, north of the Conrail Main Line and east of Lake Avenue. Although a number of retail uses currently exist in the two (2) blocks west of Lake Avenue, new retail uses should not be located there. Retail development or redevelopment between Lake Avenue and the railroad line should be restricted to the relocation and expansion of existing uses, possibly in conjunction with the realignment of Central Avenue and other traffic circulation improvements, unless there is a plan which incorporates these blocks into a planned unit residential development. Under no circumstances should retail uses be permitted north of Middlesex Avenue.

In two areas of the downtown, shown on the Land Use Plan, it is recommended that an "office overlay" zone be created which would use incentives to encourage the assembly of smaller parcels into single parcels of substantial enough size to permit new professional office development and the requisite parking. Access points should be limited to reduce traffic conflicts.

Development in the downtown should no longer be permitted an exemption from on-site parking requirements. Each use should be required to provide parking on-site, and the Zoning Ordinance should specify the number of spaces required for specific uses.

Another recommendation regarding the zoning of the downtown, as well as Metuchen's other business districts, has to do with eliminating the "cumulative" zoning currently in effect. The term "cumulative" zoning describes a situation in which all of the uses permitted in, say, a neighborhood business district are also permitted in a highway business district, along with other, more intensive, uses, and all of the uses permitted in both of these districts are permitted in an industrial district. Since an important objective of this plan is to encourage the viability of Metuchen's central business district, it is recommended that each of the non-residential zones be assigned a specific set of permitted uses. Although some of the enumerated uses may be permitted in more than one district, the goal is to establish a set of uses for each zone which is appropriate in terms of location, scale and off-site impacts (visual, traffic, parking) and which is, with some exceptions, exclusive to that zone.

Finally, areas contiguous to the central business district which are currently zoned for business but developed residentially should be rezoned for residential use to avoid the intrusion of business activities into residential areas and to reinforce the limits of the existing CBD area.

#### Other Recommendations

Two other areas of Metuchen have been reexamined as part of the Master Plan review process.

The Borough has witnessed the steady conversion of residences along Amboy Avenue and Main Street to professional offices over the last several years. While office conversions are permissible under the current zoning, the participants in the Master Plan discussions have expressed concern over the compromising of the original residential character of these areas, the increasing parking problems along Main Street and Amboy Avenue, and the potential for competition with office space to be created in the central business district and elsewhere as specified in the Land Use Plan. It is therefore recommended that new office conversions be prohibited and that techniques be sought which would promote the use of the remaining residential structures as residences rather than as offices, permitting the creation of as many as two (2) or perhaps more residential units within the main dwelling. Strict standards should be established and enforced regarding parking requirements (particularly along Main Street), sizes of units, owner-occupancy, and amenities whenever such conversions occur.

Finally, a concern has developed regarding the northeast corner of the Borough. That area has remained residentially zoned despite the existence of a number of non-residential uses. It is recognized that certain parcels on the south side of Middlesex Avenue are potentially redevelopable. They are currently zoned "R-4" as are the adjacent Metuchen Manor apartments. After serious reconsideration of the existing zoning, it was decided that the "R-4" designation should continue in the entire triangle formed by Conrail to the south, Middlesex Avenue to the north and the Edison boundary to the east. This will ensure that any redevelopment which occurs on the redevelopable tracts will be multi-family residential, complementary to the Metuchen Manor development.

Consideration was also given to rezoning a portion of the "R-1" area lying north of Middlesex Avenue for professional office or limited commercial uses. This area is already virtually entirely developed with non-residential uses, most of which were approved by variance and were never permitted uses. However, the desirability of the "R-1" zoning which exists there now was ultimately re-affirmed. It was felt that rezoning for non-residential uses could promote redevelopment which would be incompatible with the residences to the west in terms of scale and character. Moreover, due to the proximity of the hospital, the area is particularly vulnerable to development with medical offices which traditionally have a comparatively high trip generation rate. In view of the proximity of the high school and the residential development, and considering existing traffic conditions on Route 27, increasing traffic in the area would be detrimental to the public good.

In addition to implementing the recommendations contained in this document regarding the rezoning of various areas of the Borough, attention should be paid to upgrading the standards in the Zoning Ordinance pertaining to site plan review, particularly in non-residential areas. Strict attention should be paid to developing appropriate requirements for buffering and screening of business and industrial uses, especially where they will be located adjacent to residential areas. Additionally, consideration should be given to the traffic impacts of all developments, particularly where a development is proposed to occur at or near a major intersection, and to the possibility of requiring improvements to the adjacent street or intersection.

## RELATIONSHIP TO OTHER PLANS

The Municipal Land Use Law stipulates that a master plan must include a specific policy statement indicating the relationship of the proposed development of the municipality as set forth in the local master plan to (1) the master plans of contiguous municipalities, (2) the master plan of the county in which the municipality is located, and (3) the State Development Guide Plan. The following paragraphs describe the plans of Edison Township, the State of New Jersey, and Middlesex County and relate Metuchen's Land Use Plan Element proposals to the policies expressed in those plans.

### Edison Township

Edison Township completely surrounds the Borough of Metuchen. The present zoning along both sides of the common municipal boundary line is illustrated on Plate 13. In general, land use policies in the two municipalities are consistent with regard to adjoining land areas. The exception is in the northeast corner of Metuchen along Middlesex Avenue just east of the railroad crossing. The north side of Middlesex Avenue is zoned for single family residences on 10,000 square foot lots, although existing land uses also include an office, a bank, a quasi-public use, and the Metuchen High School. A portion of the south side is zoned for multi-family residences and contains apartments. The remainder of the south side is zoned for single family residences and contains an isolated residence and a service station.

Edison's zoning is G-B (general business) adjacent to the apartments, office, commercial and quasi-public uses and E-I (educational-institutional) adjacent to the high school. Edison's zoning in this area reflects the current uses of land within its boundaries, which include the John F. Kennedy Memorial Hospital, retail commercial uses and low-rise apartments.

From a land use perspective, changes in the zoning of this area to achieve consistency between Metuchen and Edison would be unlikely to have any meritorious impact, since the land uses existing on adjoining properties in both municipalities are well established. Moreover, Conrail's main line separates the two municipalities along the eastern border, providing a buffer between the results of any conflicting land use policies there.

One other area is mapped as having conflicting local policies, and that is the southwestern border where medium density residential uses are zoned for and exist in Metuchen and light industrial and business office uses are provided for in Edison. However, Route 287 separates the two municipalities at this point and provides an effective barrier between potentially incompatible uses.

#### Middlesex County

The Middlesex County Planning Board's Proposed Land Use Plan - 2000 shows Metuchen's existing residential areas as residential and existing commercial and light industrial areas as non-residential. In addition, a small open space conservation area is indicated in the northwest corner of the Borough in the Dismal Brook area. The County plan does not as yet specify specific types of uses or densities. To the extent that land use changes have been proposed in the central business district and in the northwest quadrant, Metuchen's Land Use Plan Element is not consistent with the County's policies as shown on the Proposed Land Use Plan - 2000. However, it is consistent with and promotes the County's commitment to providing housing opportunities.

#### State of New Jersey

The revised draft of the State Development Guide Plan (May 1980), prepared by the New Jersey Department of Community Affairs, shows Metuchen as part of the State's "Growth Area".

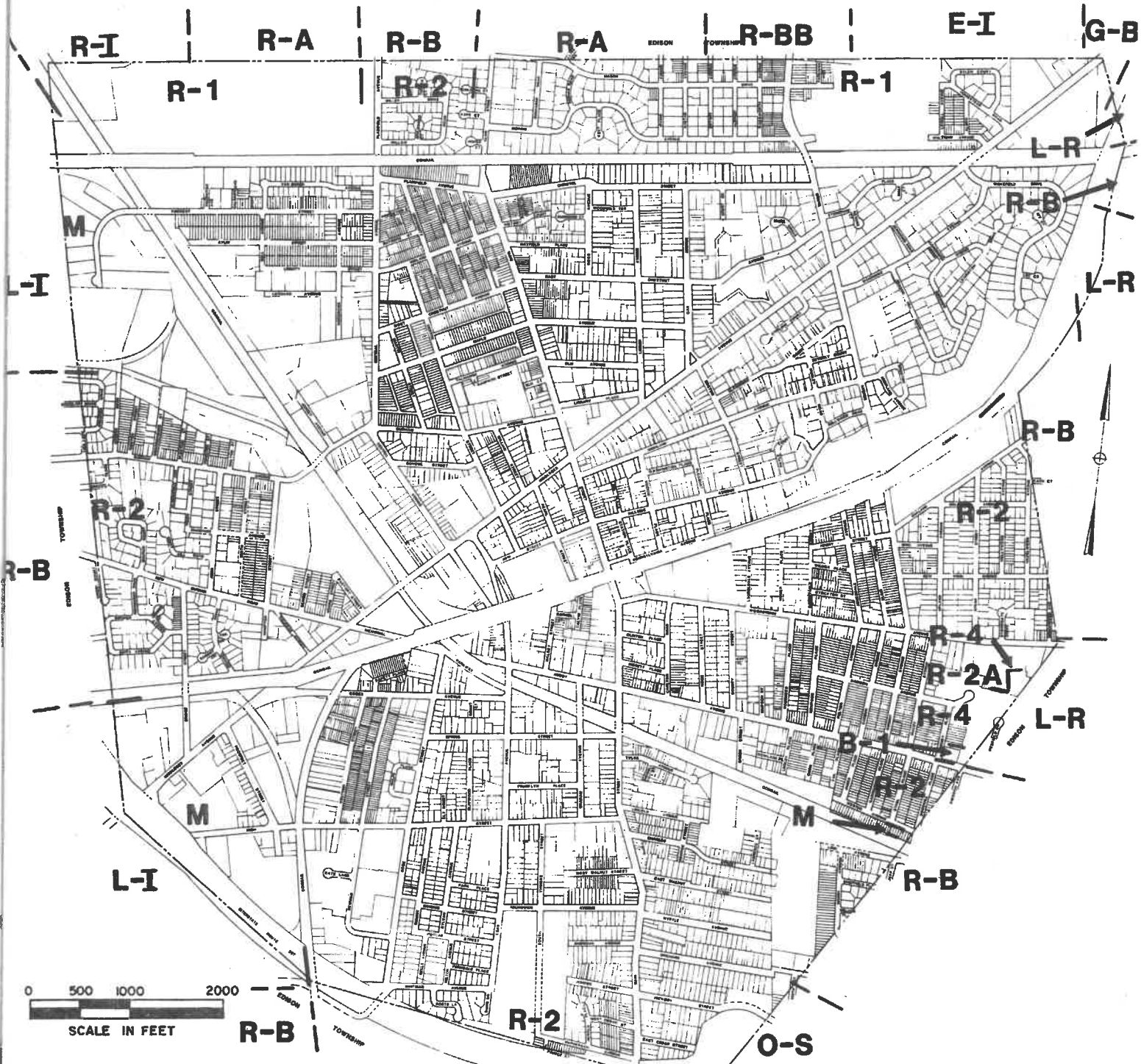
The Growth Areas include those regions of New Jersey where development has already occurred to an extensive degree, as well as partially suburbanized areas where accessibility to employment and services make them particularly suitable for development...

It should be emphasized that the Growth Area designation does not imply that only growth supporting investments will be made within this area or that the development of environmentally sensitive lands is encouraged. Land acquisition for recreation and resource conservation, as well as local controls protecting flood plains, steeply-sloped areas, wetlands, agricultural uses and forested areas constitute valid components of the kind of land use pattern which should characterize such Growth Areas. (p. 47-49)

With respect to the State's policies for Middlesex County as a whole, the Guide Plan indicates that most of the County is designated as a Growth Area.



**BOROUGH OF METUCHEN**  
Middlesex County, New Jersey



**EDISON TOWNSHIP DESIGNATIONS**

- |                               |                             |
|-------------------------------|-----------------------------|
| R-A SF 2-3/Acre               | L-I Light Industry          |
| R-BB SF3-4/Acre               | G-B General Business        |
| R-B SF4-5/Acre                | L-R Low Rise Apartments     |
| R-I Restricted Industry       | O-S Business-Office Service |
| E-I Educational/Institutional |                             |

PLATE 13  
**Comparison Of Zoning**  
**Borough Of Metuchen And Edison Township**

County policy recommends that new development occur adjacent to existing development and infrastructure and/or at selected new growth nodes. Older cities should be strengthened and revitalized. Critical environmental areas and farmland should be conserved ...

All of the existing and proposed sewerage facilities in Middlesex County now serve or will serve areas that are classified as Growth Areas. While much of the infrastructure is in place, a significant amount of investment is required to correct existing problems and to accommodate additional growth in these areas.

The proposals contained in Metuchen's Land Use Plan Element appear to be consistent with State planning policies.

## IMPACTS OF THE PLAN

If the plan is implemented fully, the major impact will be an increase in traffic. The traffic impact is not likely to be specific to any particular location, but, instead, will be reflected in longer peak periods. While the limitations of the roadway system within the Borough preclude any major improvements to alleviate traffic circulation problems, there are a number of strategies that the Borough can consider in the future which, while not eliminating congestion, can bring about an improvement in traffic flow. First, any reduction in side stream interference to through traffic movement will bring about an improvement in traffic flow. Consequently, in developing its zoning requirements and in reviewing site plans for development or redevelopment, the Borough should make an effort to reduce the number of driveway openings to and from arterial and collector roadways. Furthermore, whenever possible, minor operational improvements such as the provision of right turn lanes and/or an increase in the radii at intersections, should be required of developers at the time of site plan review. At particularly congested intersections, it may be necessary to restrict turning movements to right turns only.

One major municipal roadway improvement is recommended within the Borough. The major underdeveloped areas of Metuchen lie in the northwest quadrant. The industrial uses which exist in the Forrest Street area are typically warehousing and storage types of facilities adding little to the Borough's tax base. For this area of the town to develop further with additional industrial uses it would be necessary to improve its accessibility. It is therefore recommended that Jersey Avenue be extended through to Forrest Street to provide a connection to Durham Avenue. This will improve access to I-287, facilitate access for public safety vehicles, and still keep traffic out of the developed residential neighborhoods to the east of the Forrest Street area. As part of this improvement, Durham Avenue, between Central Avenue and a point just west of the Conrail right-of-way, should also be improved. It is recognized that the implementation of this recommendation may have to await redevelopment of the area north of the Borough garage, and, at this time, that area is not proposed to be redeveloped.

Certain roadway improvements outside of the Borough's jurisdiction are also urged to facilitate traffic flows in Metuchen. The first is the prompt creation of the proposed new interchange between Route 287 and Talmadge Road in Edison Township. The second is the rerouting of Route 27 to cross the Conrail railroad line instead of routing traffic onto Essex and Lake Avenues. This improvement, while not immediately pending, has long been endorsed by Borough officials and is still considered desirable despite the practical difficulties involved in its implementation.

In terms of schools, there is adequate capacity in the system to absorb a much greater number of schoolchildren than the number which would result from any of the development/redevelopment proposals. It is not anticipated that more than four or five hundred new dwelling units could be constructed under the plan, assuming all of the recommended redevelopment areas and conditional residential areas were to be built to full capacity. The resultant number of schoolchildren, should this occur, would be approximately one hundred (100).

Parking impacts resulting from the implementation of the plan as proposed are expected to be minimal, since all development would be required to provide the necessary parking. However, should the sales volume levels of retail establishments on Main Street increase as a result of the additional population, the existing theoretical parking deficiencies could become more evident to shoppers. However, it is hoped that any increase in sales volume will reflect pedestrian rather than automobile access.

The condition of sewer lines within the Borough is uncertain. It is possible that additional development could require replacement of lines. At the time a major development proposal is submitted, the developer should be required to prove the adequacy of the sewerage system and, if necessary, contribute a pro-rata share of the cost of the replacement through off-tract improvement requirements. There is sufficient treatment capacity to handle the level of development proposed.

The plan is not anticipated to have a detrimental effect on any historic sites within the Borough. To avoid an adverse environmental impact, residential development is recommended to be precluded within any portion of the flood

plain of Dismal Brook. The plan envisions that all or most of the Dismal Brook flood plain will continue to be retained as open space. It also recommends clustering residential development on adjacent areas outside of the flood plain. Grooming of the open space will have a positive aesthetic effect on adjoining areas for which residential uses are proposed, enhancing property values and offsetting higher densities. Air pollution levels may be increased in the downtown area due to longer peak hour traffic volumes.

Energy conservation will be promoted by the plan. The intensification of housing opportunities in close proximity to the railroad station should help to reduce automobile dependency. Moreover, it is recommended that sufficient design flexibility be incorporated into an amended Zoning Ordinance to encourage the use of solar energy where appropriate.

It is anticipated that any new development under the plan will have a positive impact on the municipal fisc. At the densities proposed, new dwelling units will tend to be smaller in size and will therefore produce fewer schoolchildren and a lower demand for services than single family homes. In addition, new residential development can be expected to have a positive effect on retail sales volumes and land values generally.

Social impacts of the plan are expected to be positive. Assuming approximately one thousand (1000) new residents (if full implementation of the plan occurs), the Borough will reclaim some of the population lost during the preceding decade. The new households will most likely include a mix of smaller families, single persons, young couples and the elderly. Housing needs and demands, both locally and within the region, will be concomitantly reduced.

Summarily, the overall effect of the implementation of the plan will be positive, with drawbacks related primarily to traffic. At the time of development plan review, the Borough is cautioned to be attentive to parking requirements and environmental concerns as well as to the condition of the sewerage system.