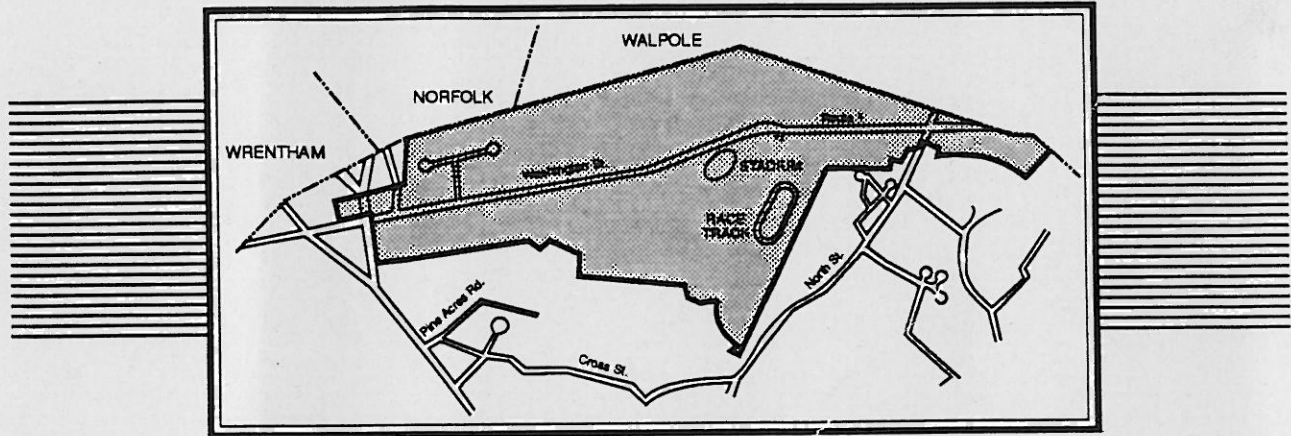


Tim Higgins
543-7250

TOWN OF FOXBOROUGH
SPECIAL USE (S-1) ZONING DISTRICT
MANAGEMENT PLAN



JUNE 30, 1989

*This project was funded through a
Special Project / Strategic Planning Grant made by the
Executive Office of Communities and Development (EOCD).*

SUBMITTED BY:
HMM ASSOCIATES, INC.

IN ASSOCIATION WITH:
EDITH M. NETTER & ASSOCIATES
75 STATE STREET - 6TH FLOOR
BOSTON, MASSACHUSETTS 02109



H M M A S S O C I A T E S , I N C .

ENGINEERS, ENVIRONMENTAL CONSULTANTS & PLANNERS

TOWN OF FOXBOROUGH
SPECIAL USE (S-1) ZONING DISTRICT
MANAGEMENT PLAN

June 30, 1989

Submitted to:

TOWN OF FOXBOROUGH
Growth Management Study Committee

Submitted by:

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This project was funded through a Special Project/Strategic Planning Grant Award made by the Executive Office of Communities and Development (EOCD).

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JUL 31 1989

PLANNING
BOARD

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- Timothy D. Higgins, Planning Administrator
- Michael J. Coppola, Co-Chair
- Donald J. Schmidt, Co-Chair
- Allen F. Curtis
- Cheryl L. Darlington
- Douglas L. Davis
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TOWN OF FOXBOROUGH
SPECIAL USE (S-1) ZONING DISTRICT MANAGEMENT PLAN REPORT

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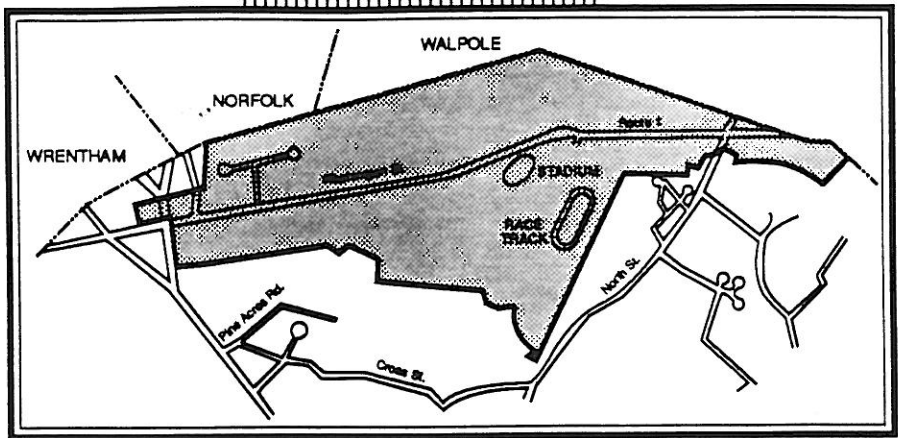
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1.0 INTRODUCTION

1.0 INTRODUCTION

1.1 Purpose of Study

The Town of Foxborough has experienced increasing development pressure and growth over the past few years. Pressure within the Special Use (S-1) zoning district has been particularly extreme. Development in this area has outstripped current municipal infrastructure limitations. In particular, low-water pressure, lack of municipal sewer, environmental constraints, traffic and parking problems associated with Sullivan Stadium, and water quality protection needs for the Route 1 Town Well have led the Town to review its existing regulations governing land uses within this area. The approximately 800-acre Special Use (S-1) zoning district was established by the Town to include a variety of non-residential land uses. The Foxborough Industrial Park, Sullivan Stadium, Foxborough Harness Raceway, and Conrail tracks are all located within the Special Use (S-1) zoning district, they present various opportunities and development options.

The Town of Foxborough wishes to implement regulations which will promote growth management and land use policies in the Special Use (S-1) zoning district. It also desires to establish a legally defensible impact fee system, which will accurately gauge costs associated with the additional impacts on the Town while allowing development to proceed.

This infrastructure impact and management plan study has been funded through an Executive Office of Communities and Development (EOCD) Special Project/Strategic Planning Grant. These funds were also used to establish immediate regulations needed to manage growth in the Special Use (S-1) zoning district. The study identifies potential municipal infrastructure and service impacts from a maximum zoning build-out to create the scenario for an impact fee schedule rationale and to lay the groundwork so that the Town will be prepared to establish such a fee following adoption of state enabling legislation, expected to be passed in the near future. To address the immediate needs for the S-1 District, specific zoning modifications are recommended as a growth management technique to assure that the Town's Planning goals for the Route 1 corridor are reinforced.

1.2 Executive Summary

In September, 1988, the Town of Foxborough was awarded a \$20,000 Special Project/Strategic Planning Grant from the Executive Office of Communities & Development (EOCD) to review the existing development controls within Route 1's Special Use (S-1) zoning district, and to identify potential municipal infrastructure and service impacts from possible new development. The study grant was also directed at considering an impact fee system.

o Current Municipal Regulations (Prior to May 1989, Town Meeting)

The S-1 zoning district by-law, adopted by the Town of Foxborough in 1972, was designed to accommodate and facilitate the development of non-residential uses. The permitted use table lists an assortment of uses which are permitted as of right or by special permit. However, neither the use controls nor dimensional requirements provide the necessary protections to nearby residential areas. They also do not adequately reflect the Town's goals for Route 1.

Other by-laws or environmental regulations which currently exist within the S-1 District include the Wetland Protection and Floodplain Overlay Districts; Water Resource Protection District, which limits hazardous waste storage and the amount of impervious land; and the EPA's Federal Sole Source Aquifer Regulation, which includes portions of Foxborough, sets up a review for projects which may contaminate the aquifer through a recharge zone.

o Land Use and Vacant Land Inventory*

The dominant land use in the S-1 District is the Sullivan Stadium and Foxborough Harness Raceway (29% of the total district). Over 60% of the land in the S-1 District is vacant or undeveloped. The developed land in the district is primarily commercial. Commercial uses in the district include automobile retail and service, restaurants, motels, and offices (only 0.5% of the total district is residential).

o Natural Resources Inventory

The largest wetland system in the S-1 District is located in the southeastern portion, east of Route 1 and north of Pierce Street.

Since the Town's sewer system does not service the S-1 District, the presence of poor soil conditions for on-site sewage facilities are a potential development constraints. The poorest soils for on-site sewage systems are located in the southern and western portions of the district. Sewage treatment can be installed in areas delineated on the soil potential map with medium and high potential (see Figure 3).

Protection of the Route 1 Town Well, which is located in the southern portion of the S-1 District, is provided for in the Water Resources Protection Overlay District Zoning By-Law completed for the Town by SEA Consultants, Inc. This By-Law was adopted by the Town Meeting on May 11, 1989 (Appendix B).

o Growth Projections

The future development potential of Sullivan Stadium and Foxborough Raceway was the major focus of the development build-out analysis completed by the Metropolitan Area Planning Commission (MAPC). Three build-out scenarios were considered including both maintaining and eliminating the Stadium and Raceway. Under an office/retail reuse scenario, with both the Stadium and Raceway being eliminated ("worst-case" scenario),

* Land use and vacancy data was calculated from the Metropolitan Area Planning Council's June 23, 1986 Foxborough Non-Residential Build-Out Analysis (Appendix A).

almost 8 million gross square feet of new commercial floor area could be constructed with the addition of approximately 30,000 new employees in the Town. While this build-out reflects the maximum allowable under existing zoning (minus unbuildable wetland portions), not all of this space would be built at once. Based on Foxborough's recent non-residential space absorption of approximately 200,000 - 300,000 gross square feet during the past couple of years, it could take 20-25 years for all of this land to be absorbed in the non-residential market.

o Associated Impacts from Growth Projections

- 1) Water Supply - To meet the projected 614,307 gallons per day (gpd) requirements of the "worst-case" build-out for the S-1 District, an additional Town well would be needed to go on-line during the 20-25 year build-out period.
- 2) Sewage Generation - With full build-out, 558,461 gpd of sewage would be generated. While package treatment plants could be utilized to meet this requirement, there are a number of locations particularly in the southern portion of the S-1 District where septic systems would not be appropriate due to the soils' poor percolation rates. (Package treatment sewer facilities are self-contained systems designed to handle sewer and wastewater on a localized level.) While these facilities would be ideal for the S-1 zoning district area, they are strongly discouraged for use in Massachusetts. However, the Department of Environmental Quality Engineering (DEQE) is currently reviewing standards and specifications in the State.

The area within the Town's well protection zone should also be avoided for new sewage systems. However, facilities which provide tertiary treatment can be constructed within the Zone III areas.

- 3) Traffic - With full build-out, Route 1 would have to be widened to a six-lane divided highway from I-495 to North Street within ten years. A free-flow right-turn lane would have to be added eastbound on North Street; a second left-turn lane added northbound on Route 1 at North Street; and revised signal phasing and increased signal cycle at Route 1 and North Street. All of these improvements are estimated to cost approximately \$5 million (1989 dollars).

o Sullivan Stadium Considerations

- 1) Parking - Impacts based on a 1985 HMM Associates study for the Sullivan Stadium owners, current parking supply at Sullivan Stadium and adjoining parking lots is 14,232 spaces. This is below total demand of 16,171 for a sell-out event at the Stadium, which could bring in an estimated 60,000 persons, and creating a shortfall of 2,039 spaces.

- 2) Pedestrian - Off-site satellite parking areas create major pedestrian problems. Additional parking at Sullivan Stadium would reduce dangerous pedestrian activity along Route 1 for Sullivan Stadium events.
- 3) Rail Access - There are special football trains running to Foxborough from South Station for the eight home games during the fall. This method of travel could eventually lead to reduced highway congestion along Route 1, fewer parking space demand, and pedestrian safety (since pedestrians need not cross Route 1 to get to the Rail Station).

o Planning Objectives and Goals for the S-1 Zoning District

The following planning objectives and goals were adopted by the Growth Policy Committee and were utilized in developing the recommendations for zoning by-law revisions in the S-1 District:

- 1) Promote economic development of the Route 1 Corridor and increase real estate tax revenues.
- 2) Maintain good planning and site review principles for new development proposals (i.e., encourage commercial cluster development approaches (PD), reinforce front yard buffers, provide performance standards and more definitive criteria for the Special Permit process, etc.).
- 3) Promote better land uses (i.e., professional office/R&D users) along the Route 1 Corridor, and discourage strip (or "ribbon") type development.
- 4) Enhance environmental protection and preservation, and preserve Town's rural character.
- 5) Minimize the number of access points onto Route 1 to reduce traffic impacts.
- 6) Minimize demands placed on Town services and infrastructure.
- 7) Implement proper procedures to assure that future development of the Sullivan Stadium and Foxborough Harness Raceway will be completed in accordance with the above planning objectives, and others to be considered that are focused on stadium uses.

o Alternative Growth Management Control Options

Three development management approaches were proposed by the consultant team for consideration by the Town as follows:

- 1) Option #1: Interim Zoning Overlay District (IZOD) - This option would create a special permit overlay district for the S-1 District for a period of two years or less to allow Foxborough to complete permanent zoning based on a long-term planning process, and the market considerations for the Route 1 corridor.

- 2) Option #2: Incentive Zoning - This is a regulatory mechanism where the developer provides a community with a public benefit (either off- or on-site) such as open space, traffic improvements, new fire station, etc. in exchange for permission to build a project that is denser than that permitted under existing zoning.
- 3) Option #3: Modifications to Existing Zoning By-Law - This option is to detail use dimensional, and procedural changes to the existing zoning by-law to establish immediate control over development in the S-1 zoning district. Modifications considered include the site plan review procedures, special permit requirements, dimensional regulations, and changes to uses now permitted as-of-right or by special use permit.

o Impact Fees

Impact fees compensate a community for the cost of providing specific services related to new development. It is fair and equitable approach to assessing the costs associated with this development. Massachusetts has not, however, as yet adopted direct statutory authority to create such a fee system, and therefore this study considers impact fees as a future consideration by Foxborough once the necessary State legislation has been adopted.

o Recommended Growth Management Controls

After numerous meetings with the Town's Growth Management Committee and Planning Administrator, the consultant team recommended that the Town adopt a series of proposed modifications to Foxborough's zoning by-law related to the S-1 zoning district. These recommendations are graphically summarized on Table 1 (see analysis of the other options presented to the Town and described in Section 3.4, Growth Management Controls: Analysis and Recommendations).

o Proposed By-Law Revisions

On May 11, 1989, by a vote of 325 to 0, the Foxborough Town Meeting adopted a number of revised zoning by-laws as a part of the Route 1 Management Plan (see Section 5.0 for the detailed Town Warrant Article).

TABLE 1

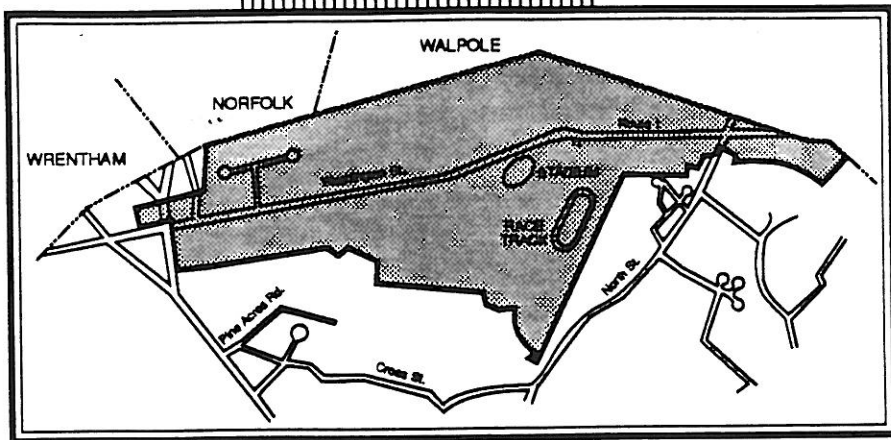
SUMMARY OF REGULATORY OPTIONS

TOWN OF FOXBOROUGH PROPOSED ZONING BY-LAW RECOMMENDATIONS IN THE S-1 ZONING DISTRICT			
PROPOSED MODIFICATIONS	MODIFICATIONS TO S-1 DISTRICT	ADOPT NEW PD/S-1 DISTRICT	ADOPT PD/STADIUM DISTRICT (IN FUTURE)
DETERMINE USES ALLOWED OR FORBIDDEN BASED ON TOWN OBJECTIVES	<ul style="list-style-type: none"> MEDIUM HAZARD USES INDUSTRIAL USES STADIUMS, ETC. AUTOMOBILE STORAGE/AUTOMOBILE AUCTIONS RAIL STORAGE YARDS MINI-SELF STORAGE WAREHOUSES TRUCK TERMINALS SPECIAL PERMIT SPECIAL PERMIT SPECIAL PERMIT NOT PERMITTED NOT PERMITTED NOT PERMITTED NOT PERMITTED 	<ul style="list-style-type: none"> SAME AS S-1 	<ul style="list-style-type: none"> TAILORED TO STADIUM USES; SHOULD BE UNDER STUDY TO PROVIDE FOR A TWO-STAGE PD PROCESS CONCEPT PLAN APPROVAL SPECIFIC PROJECT APPROVAL (SIMILAR TO PD/S-1 REQUIREMENTS)
STRENGTHEN PLANNING BOARD'S SPECIAL PERMIT REQUIREMENT	<ul style="list-style-type: none"> AMEND DIMENSIONAL CONTROLS TO ASSURE BETTER PLANNING & SITE LAYOUT 	<ul style="list-style-type: none"> FLEXIBLE CONTROLS 	
STRENGTHEN THE SITE PLAN REVIEW CRITERIA	<ul style="list-style-type: none"> AMEND SITE PLAN REVIEW CHECKLIST 	<ul style="list-style-type: none"> SAME AS S-1 	
PROVIDE FLEXIBLE CONTROLS (I.E. USE AND DIMENSION) FOR LARGE LOT DEVELOPMENT	<ul style="list-style-type: none"> NOT APPLICABLE 	<ul style="list-style-type: none"> INCREASE LOT SIZE TO 5 ACRES PROVIDE FOR LOT COVERAGE OF 70% INCREASE HEIGHT TO 60' INCREASE RETAIL TO 50% LOT LINE - NO REQUIREMENTS WAIVE OTHER DIMENSIONAL & SUBDIVISION CONTROLS (EXCEPT DESIGN & CONSTRUCTION STANDARDS) 	

1.3 Next Steps

With the Town's adoption of modifications and revisions to the zoning by-law requirements for the S-1 District, there are a number of planning and fiscal issues that should be placed on the Town's future agenda, as follows:

- o A capital improvement program for Route 1 should be established by the Planning Board and Growth Management Committee with priorities established and more detailed costs completed. This program can be implemented through private initiatives required by the Town as a part of the recently adopted Special Permit procedures for the S-1 District.
- o Discussions should be held with the major property owners in the S-1 District, including Sullivan Stadium and Foxborough Raceway, to determine whether additional modifications to the S-1 District zoning may be necessary to further the Town's planning objectives and goals for this district. For example, a two-stage planned development procedure for stadiums was considered in Section 3 of the recommendations but not presented to the May, 1989 Town Meeting.
- o If an enabling statute is adopted by the State legislature providing for municipalities to establish an impact fee system, the Town should utilize this report as a beginning point for implementing such a fee system either for Foxborough as a whole, or for the S-1 District alone.
- o Finally, efforts should be taken to monitor the effect of the new zoning for the S-1 District through interviews with prospective developers or owners of the land parcels within the district. A major objective of the proposed revisions was to ensure proper planning controls while furthering the creation of new development providing additional tax revenues to the Town. This balance should be reviewed and appropriate measures taken to assure this balance be maintained in the future.



2.0
SPECIAL USE (S-1) ZONING
DISTRICT ANALYSIS

2.0 SPECIAL USE (S-1) ZONING DISTRICT ANALYSIS

2.1 Existing Conditions (Prior to May 1989 Town Meeting)

2.1.1 Current Municipal Regulations (Prior to Adoption of Changes by Town Meeting in May, 1989)

o Special Use (S-1) Zoning District Regulations

PURPOSE

The S-1 District was established in 1972 to encourage the innovative and creative design for office and industrial development. The district by-law was designed to accommodate preferred high density land uses. Such uses could potentially produce detrimental effects on neighboring properties if not strictly controlled as to location and design. The S-1 District's dimensional regulations were established to insure high standards in the layout, design, and construction of office and industrial development.

LOT CONFIGURATION

Minimum Lot Size: 60,000 square feet

Minimum Frontage: 200 feet (50 feet if subdivision is off Route 1)

Minimum Front Yard: 75 feet (50 feet if subdivision is off Route 1)

Minimum Side Yard: 50 feet (25 feet if subdivision is off Route 1)

Minimum Rear Yard: 50 feet

Maximum Building Height: 40 feet

Maximum Building Lot Coverage: 40% (for building only)

USES

A. Permitted (As-of-Right)

- Low Hazard (see Attachment A)
- Moderate Hazard (see Attachment A)
- Mercantile/Retail - limited to 25% of gross floor area of structure; and drive-ins and sales by vending machines are not permitted
- Industrial
- Business/Professional Offices (except funeral establishments and massage parlors)

- Theaters
- Night Clubs, Taverns (excluding drive-in type establishments which promote the consumption of food on the premises)
- Museums, Libraries, etc.
- Churches
- Recreation (excluding drive-in theaters)
- Schools; Public, Parochial
- Hotels, Motels
- Agriculture - Crop (only on land parcels of 5 acres or more)
- Municipal Facilities
- Accessory Uses (designed to cater to employees)

B. Uses Not Permitted (Prohibited)

- High Hazard
- Detention Facilities
- Lodging, Boarding
- School and Farm Dorms (except where accessory to a permitted agriculture use for seasonal migrant workers or permitted industrial use, such as watchman quarters)
- Multi-Family Dwellings
- Two-Family Dwellings
- Detached Single-Family Dwelling (except accessory to permitted agricultural and industrial uses)
- Mobile Homes (except accessory to permitted agricultural and industrial uses)
- Recreational Vehicles
- Agriculture - Livestock
- Cemeteries
- Municipal Facilities
- Accessory Uses (residential uses, etc.)
- Planned Development - Cluster
- Planned Development - Varied Cluster
- Planned Development - Housing
- Planned Development - Mixed

C. Special Permit (SP) Required/Granted By Planning Board

- Planned Development/Business: Five (5) acre minimum lot size required. Allowances from the normal density, dimensional and parking requirements may be permitted subject to standards hereinafter set forth.
- Planned Development/Industrial: Ten (10) acre minimum lot size required. Allowances from the normal density, dimensional and parking requirements may be permitted subject to standards hereinafter set forth in the Zoning By-Laws section, Industrial Performance Standards.

- Water Resources Protection District: Overlay district superimposing the S-1 60,000 square feet minimum lot size requirement. New commercial and industrial activities as well as expansion of existing uses may be specially permitted if discharged wastewater is controlled and proposed use shall not be substantially more detrimental to the aquifer recharge area (Area 2A) than existing use.

D. Special Use Permit (SUP) Required/Granted By Board of Appeals

- Stadiums
- Private Schools/Profit (excluding tractor trailer schools using public roads, daycare centers, and nurseries)
- Hospitals, Nursing Homes
- Public Utilities
- Clubs, Golf, Country
- Recreation/Non-Profit
- Recreation/Profit

o Zoning Overlay Districts

WETLANDS PROTECTION DISTRICT

The Wetlands Protection District overlays other districts to insure that lands in the Town of Foxborough, subject to seasonal or periodic flooding shall not be used for residence or other purposes in such a manner as to endanger the health, safety or welfare of the occupants of the wetland areas, or of the public generally. The overlay district is intended to protect, preserve and maintain the water table and water recharge areas within the Town so as to preserve present and potential water supplies for the public health and safety of the Town. It is also to assure the continuation of the natural flow pattern of the water courses within the Town, in order to provide adequate and safe floodwater storage capacity to protect persons and property against the hazards of flood inundation.

Under Title V of the State Environmental Code, a leaching facility of subsurface sewage disposal systems must be setback at least 50 feet horizontally from the boundary of wetlands defined under the Massachusetts Wetlands Protection Act (MWPA) (310 CMR 15.03(7)). The setback distance is determined by measuring from the boundary of the area in question or from the contour of the mean annual flood elevation in inland areas, whichever is further from the water body. The Foxborough Health Department has increased this setback to 100 feet while the Foxborough Wetland By-Law has further increased this setback to 150 feet.

The Town of Foxborough Wetland By-Law also states that a septic system over an aquifer or within 250' of an aquifer must be located at least 250' from other existing or proposed septic systems. Any system discharging to soils within a recharge area or within 100' of a recharge area must be 200' from other systems.

FLOODPLAIN DISTRICT

The Floodplain District was established as an overlay district and includes all special flood hazard areas designated as Zone A, A1-30 on the Foxborough Flood Insurance Rate Maps, (FIRM), and the Flood Boundary and Floodway Maps, dated August 19, 1979, on file with the Town Clerk, Planning Board and Building Commissioner. These maps as well as the accompanying Foxborough Flood Insurance Study, were incorporated by reference into the Floodplain District. (FPD was inserted by STM 11/26/79, Article #18.)

WATER RESOURCE PROTECTION DISTRICT

Amendments to the Water Resource Protection District were adopted at the May 1989 annual Town Meeting. The Water Resource Protection District is an overlay district which protects areas of Zone II, Zone III, future potential aquifers, and bodies of water. The district regulates uses, drainage, erosion and sedimentation control, monitoring and waste disposal. Sanitary landfills, storage of road salt, underground storage tanks, and junkyards are among other land uses prohibited in the district. Some of the uses allowed by Special Permit include golf courses, earth removal, dry-cleaning establishments, and storage of toxic or hazardous substances.

Zone II and Zone III of the Route 1 well extend through the S-1 District (Figure 1). The Zone II area includes the southwest section of the S-1 District. The Zone II area encompasses the cranberry bogs, Route 1, Lincoln Road, and sections of Pine Street and Main Street and Pine Acres Road. Zone III extends from the Zone II boundary on Route 1 to the Town border and encompasses Pierce Street, Turner Road, and parts of Pine Street and Main Street.

o State Wetlands Regulations Related to Development in General

Wetlands are protected in Massachusetts under both the Massachusetts Wetlands Protection Act (MGL Chapter 131, Section 40) and Regulations (310 CMR 10.00) and Section 404 of the Federal Clean Water Act. The Massachusetts Wetlands Protection Act (MWPA) regulates work within wetland resource areas in order to protect the statutory interests which wetlands provide including:

- Flood control,
- Storm damage prevention,
- Protection of groundwater supplies,
- Protection of public and private water supply,
- Prevention of pollution,
- Protection of fisheries,
- Wildlife habitat, and
- Protection of land containing shellfish.

Under MWPA, areas that are considered regulatable resources include: waterways and water bodies such as ponds and streams; swamps and marshes where the vegetational community consists of more than 50% wetland species; and areas subject to flooding including areas bordering streams and isolated areas of sufficient size. Only a small amount of wetland resources may be altered with a permit and only if certain "performance standards" are met. Thus, wetlands for the most part preclude development although some disturbance of wetlands is allowed under the MWPA regulations.

Section 404 of the Clean Water Act is enforced by the Army Corps of Engineers. Permits are required for the discharge of fill into waters of the United States (including wetlands associated with them). Water Quality Certificates are required from the DEQE Division of Water Pollution Control for work requiring an Army Corps Permit. Wetlands under Section 404 are defined by vegetation, soils, and hydrology. Thus, wetland delineations using Corps methodology may differ somewhat from wetlands delineated under the MWPA.

Title 40, Section 18 of the Code of Federal Regulations regulates sewage disposal, the construction of leaching fields, the storage of petroleum products, hazardous materials, solid waste, vehicle maintenance, paving, and many other activities in sensitive water supply areas. Sensitive water supply areas are considered the Zone II as defined in the DEQE "Guidelines for Public Water Supply". For surface water supplies, this includes streams which have a flow exceeding one and six tenths cubic feet per second for at least six months of a year and land within 100 feet of the 100-year floodplain.

o Federal Sole Source Aquifer Regulation

The Environmental Protection Administration (EPA) has recently (December 1988) designated the Head of the Neponset Aquifer (HNA) a sole source aquifer, pursuant to Section 1424(e) of the Safe Drinking Water Act (42 U.S.C. 300f, 300h-3(e), Pub. L. 93-523). This area covers 30 square miles including portions of Foxborough and neighboring communities. The EPA will review requests for federal financial assistance for projects in this area. No commitment for assistance will be made for projects which may contaminate the aquifer through a recharge zone.

2.1.2 Land Use and Vacant Land Inventory

Less than half of the S-1 District has been developed. Of the approximate 800 acres in the district, 37.5% has been commercially developed, 0.5% residential, and the remaining 62% is vacant or undeveloped. Sullivan Stadium and the Foxborough Harness Raceway are the dominant land use in the district, encompassing approximately 230 acres (29% of the district). Other commercial activities within the district include automobile retail and service (3%), motels (2%), restaurants (1%), office (1%), and other (1.5%). Parking for Sullivan Stadium also constitutes a major land use in the district (approximately 30%) but this parking condition only occurs about 12 times per year and usually on sundays when other commercial businesses are closed.

2.1.3 Natural Resources Inventory

o Wetlands Located On-Site

Wetlands located within the Special Use Zoning District were mapped by HMM Associates (see Figure 1). It should be noted that these delineations are approximate in nature and wetland resources must be flagged in the field and surveyed before any development takes place in these areas.

The largest wetland system in the district is located in the southeastern portion, east of Route 1 and north of Pierce Street. This area consists of an extensive red maple shrub swamp. The dominant species included arrow-wood, highbush blueberry, maleberry, tussock sedge, and sensitive fern. Cranberry Bog Pond and Mann Pond are located along the eastern boundary as well as the stream which connects them. The wetlands in this region consist of a mixture of forested wetlands and freshwater marshes dominated by emergent vegetation such as cattails, phragmites, and hydrophilic grasses, rushes, and sedges.

Water flows to the east and north from the two ponds. Wetlands associated with the Neponset River have been altered to a large extent south of the Foxborough Harness Raceway. The River is culverted at this point and flows above-ground for a short distance through the center of the racetrack. North of the track, the River again flows above-ground. Pollution may have occurred to the stream since an orange substance was noted within the stream in this area. (This possible contamination has not been analyzed.)

Wetlands west of Route 1 are limited primarily to the northern portion of the district, where two wetland systems are located on the Walpole border. One system is a continuation of the Neponset River system. The second is located just west of this system and consists of an extensive shrub swamp which extends into Walpole. Both of these areas have been impacted recently by fill.

Wetlands alterations are prohibited in areas which provide habitat for rare or endangered wildlife species. The Natural Heritage and Endangered Species Program (NHESP) currently knows of no such areas located within the Special Use District.

o Soils

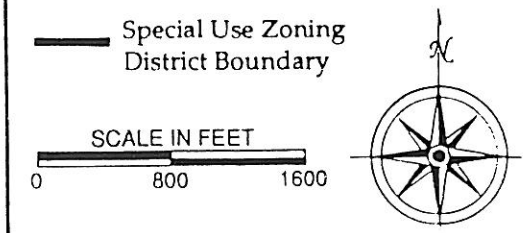
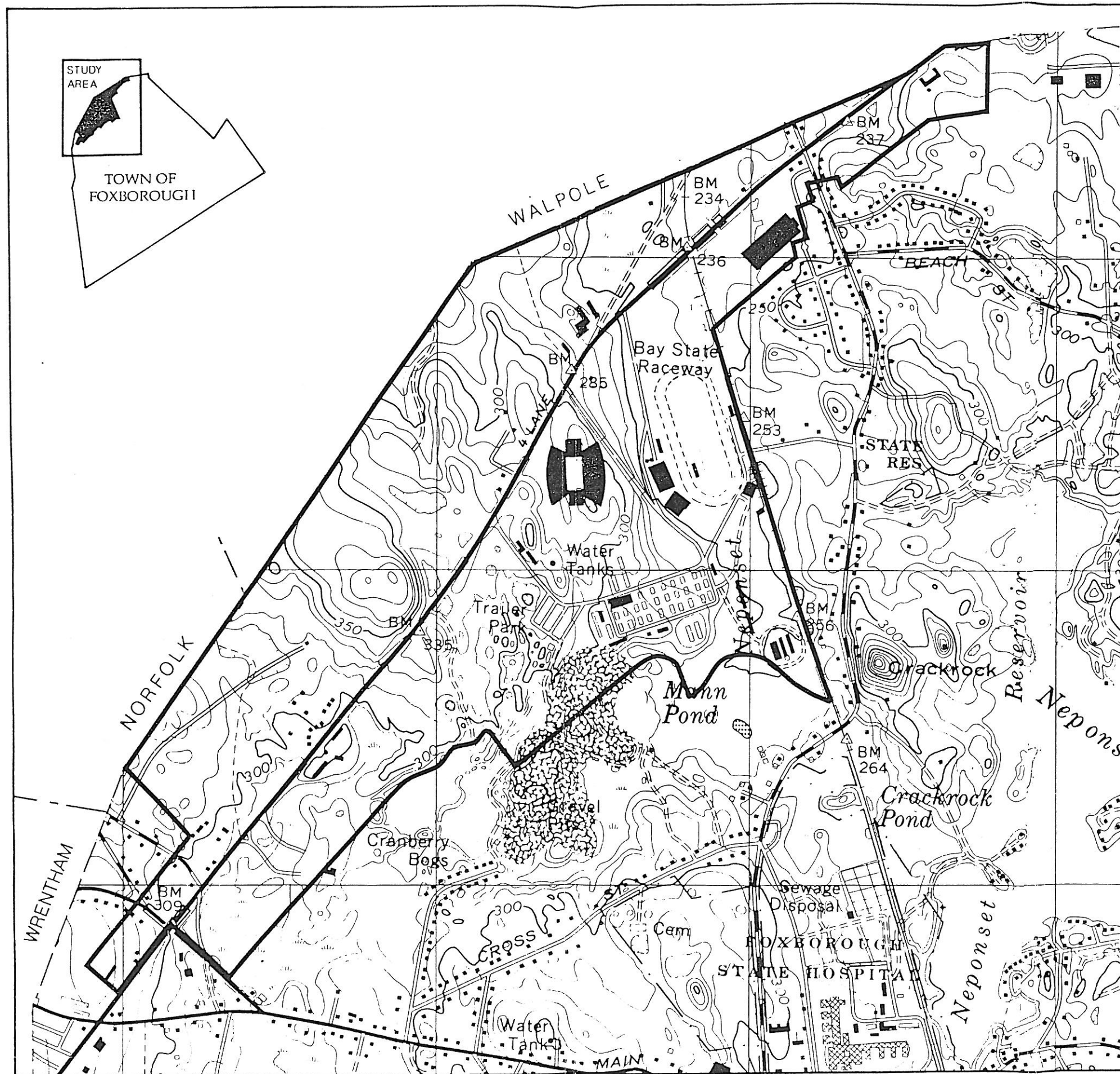
The S-1 District is not serviced by the town sewer system. Land uses in the district depend upon individual septic systems and on-site sewage treatment plants. HMM utilized Title V calculations to determine sewage generation from the build-out of the S-1 District (see Table 5).

Placement of sewage disposal systems in the S-1 District is dependent upon environmental constraints such as soils, topography (Figure 2), and wetlands. Leaching facilities acceptable under the State Sanitary Code Title 5 requirements include:

TOWN OF FOXBOROUGH

SPECIAL USE (S-1) ZONING DISTRICT MANAGEMENT PLAN

FIGURE 2 TOPOGRAPHY



- Leaching Pits - Leaching pits function best in areas where the ground water elevation is 4 feet or more and depth to bedrock is greater than 4 feet. The leaching area requirements must be determined in accordance with Title V.
- Leaching Fields - A standard leaching field system functions best on sites with: percolation rates of 10 min/inch on slopes of 5% or less, and where depth to water table and bedrock is greater than 6 feet.
- Mound Systems - A mound system is a system that is elevated above the natural surface in a suitable fill material. These systems function best on sites that have slowly permeable soils and a high water table. Design requirements must follow Title V standards. They are, however, very cost-prohibitive for most home owners.

o On-Site Sewage Treatment Plants

Another alternative to individual sewage disposal systems is the use of a single aerobic sewage treatment system with proper discharge control. The design of this alternative would have to be coordinated with Massachusetts Department of Environmental Quality Engineering since this type of system is currently under technical review. Location of a sewage treatment system could be installed in areas delineated on the soil potential map with medium and high potential.

Use of these sewage systems facilities is dependent entirely on the site and soil characteristics. Septic soil and slope characteristics evaluated include: percolation rates, bedrock depth, steep slopes, wetland characteristics, and floodplain locations. Specific soil limitation factors for on-site septic systems for the S-1 District is located in Appendix B.

Soil ratings indicate the relative quality of a soil to prevent surface and subsurface pollution of wetlands and ground water. Table 2 provides an assessment of each soil type on the site for proper functioning of individual on-site sewage disposal systems. Much of the S-1 District contains soils with a low rating (see Figure 3).

o Route 1 Town Well

SEA Consultants have recently completed a Zone II Delineation Study (and revised Water Resource Protection Zoning By-Law) on the Town's wells including the Route 1 well located between Washington Street (Route 1) and Pine Acres Road. SEA's Zone II Study delineated the "area of an aquifer that contributes water to a well under the most severe recharge and pumping conditions than can be realistically anticipated (180 days pumping at safe yield with no recharge from precipitation)." SEA Consultants also identified the Route 1 Well Zone III ("the land area beyond the area of Zone II from which surface water and groundwater drain into Zone II"). The Water

TABLE 2
SOIL POTENTIAL RATING CLASSES

- Very High Potential - Performance is at or above "standard" because soil conditions are exceptionally favorable. Installation costs are low and there are no continuing limitations.

- High Potential - Performance is at or above the "standard." Costs of measures for overcoming limitations are judged locally to be favorable in relation to the expected performance. Continuing limitations do not detract appreciably from environmental quality.

- Medium Potential - Performance is somewhat below "standard." Costs of corrective measures are high. Continuing limitations detract from environmental quality.

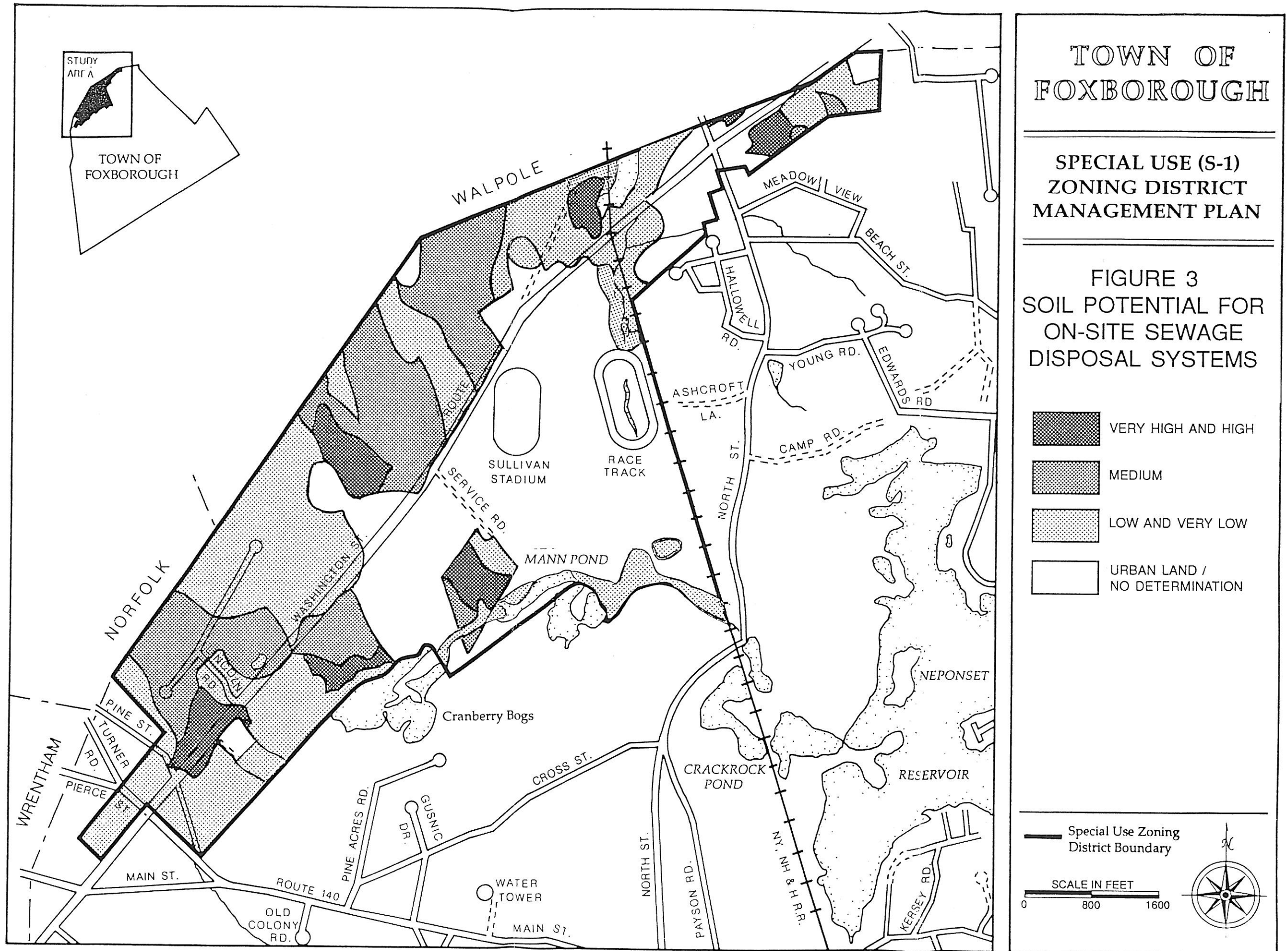
- Low Potential - Performance is significantly below "standard." Corrective measures are costly. Continuing limitations detract appreciably from environmental quality.

- Very Low Potential - Performance is much below "standard." Corrective measures are very costly. Continuing limitations seriously detract from environmental quality.

TOWN OF FOXBOROUGH

SPECIAL USE (S-1) ZONING DISTRICT MANAGEMENT PLAN

FIGURE 3
SOIL POTENTIAL FOR
ON-SITE SEWAGE
DISPOSAL SYSTEMS



Resource Protection District Map produced by SEA delineates the Zone II and Zone III areas in Foxborough which are regulated by the Water Resource Protection District By-Law. The Zone II and Zone III areas for the Route 1 well approximately cover the entire S-1 District west from Sullivan Stadium.

According to SEA's study, the S-1 District is essentially divided between the Neponset Reservoir Watershed and the Route 1 Well Zone II and Zone III areas. Sullivan Stadium is the approximate divide between the two water resource recharge areas (see the map of Water Resource Protection District, Town of Foxborough, February 1989 map).

2.2 Evaluations of Growth Projections

2.2.1 Worst Case Zoning Build-Out Scenario of the Special Use (S-1) Zoning District (Preliminary)

HMM utilized the Metropolitan Area Planning Council's (MAPC) non-residential build-out assumptions and analysis for the Special Use (S-1) Zoning District build-out (see Appendix A). Based on discussions with the Town's Growth Management Committee, three zoning build-out scenarios were developed: (1) development of Sullivan Stadium and the Foxborough Raceway parcel; (2) development of the Raceway with the Stadium remaining; and (3) both the Raceway and Stadium land uses remaining. The three build-out scenarios assume the development of office and retail uses which have the highest impact on municipal infrastructure systems (roadways, water and sewer). The current S-1 District regulations states that no more than 25% of total build-out (gross floor area) on a parcel can be retail, therefore, the build-out assumes 25% will be retail (see Table 3).

2.2.2 Infrastructure Impacts Associated with Worst-Case Build-Out

HMM utilized available information and standard calculations to determine the impacts upon the town's infrastructure systems.

o Water Supply/Sewer Generation

Foxborough's water system currently includes eleven wells, a one million gallon standpipe and a three million gallon storage tank. The water system's capacity or safe yield is estimated at 4.0 million gallons per day (mgd). The town's present daily average water consumption is below the system's safe yield. However, additional water sources are needed to meet projected water demand from the worst case build-out. Utilizing Title V, HMM determined the water demand for the S-1 District build-out (see Table 4). HMM added an additional 10% of the Title V calculations to realistically determine water demand. (Title calculations do not account for water consumption not discharged into sewage systems.)

TABLE 3
SPECIAL USE (S-1) ZONING DISTRICT
WORST-CASE BUILD-OUT SCENARIOS
(Metropolitan Area Planning Council, June 1988)

	SCENARIO 1: Development of <u>Stadium & Raceway</u> (gross sf)	SCENARIO 2: Development of Raceway, <u>Stadium Remains</u> (gross sf)	SCENARIO 3: Both Stadium and <u>Raceway Remains</u> (gross sf)
<u>TOTAL BUILD-OUT</u>			
Office	6,092,304	4,273,900	2,873,685
Retail	<u>2,030,764</u>	<u>1,424,633</u>	<u>957,893</u>
Combined Total*	8,123,068 sf	5,698,535 sf	3,831,578 sf
Total Employees	30,199	21,850	14,691
 <u>Residual**</u>			
Office	5,907,150	4,088,746	2,688,531
Retail	<u>1,969,048</u>	<u>1,362,917</u>	<u>896,177</u>
Combined Total	7,876,198 sf	5,451,663 sf	3,584,708 sf
New Employees***	29,824	20,903	13,744

* Total build-out is defined as the maximum square feet of development which can be accommodated on a parcel under existing zoning dimensions and parking requirements; unbuildable wetland portions are removed from this analysis.

** Residual build-out represents the difference between total build-out and existing development. This figure represents additional square feet that could potentially be accommodated in the S-1 District.

*** Assumes: Retail - 1 employee per 588 square feet.
Office - 1 employee per 220 square feet.

TABLE 4
S-1 DISTRICT WORST-CASE BUILD-OUT/WATER SUPPLY NEEDS*

	SCENARIO 1: Development of Stadium & <u>Raceway</u> (gpd)	SCENARIO 2: Development of Raceway, <u>Stadium Remains</u> (gpd)	SCENARIO 3: Both Stadium and Raceway <u>Remain</u> (gpd)
OFFICE:	501,615.3	352,597	237,080
RETAIL:	<u>111,692</u>	<u>78,355</u>	<u>52,684</u>
TOTAL WATER DEMAND	614,307.3 gpd	430,952 gpd	289,764 gpd

*

Title V Calculations

OFFICE: per 1,000 sq. ft.
 RETAIL: per 100 sq. ft.

Water Consumption

75 gallons per day (gpd) +10%
 5 gpd +10%

o Additional Water Supplies

There are five potential well sites in Foxborough. Combined with the current system, the total safe yield is estimated at 7.0+ mgd. To meet the projected 614,307 gpd requirements of the worst-case build-out, at least one of these wells may have to go on-line.

o Sewer Generation

The S-1 District is not currently on the Town's sewer system necessitating on-site disposal systems throughout the District. Table 5 outlines total wastewater demand by the three scenarios of the worst-case build-out. These estimates will only be useful should the Town decide in the future to extend its sewage system to the S-1 District.

2.2.3 Traffic Generation for Worst-Case Scenario

Traffic impacts for the Route 1/North Street intersection are based upon a recent turning movement count, lane geometrics, current signal timing and phasing, and a projected absorption rate of 250,000 square feet per year (50% office/50% retail land use mix)*. A 48-hour Automatic Traffic Recorder (ATR) count was taken by the Town of Foxborough on Route 1, just south of the Sullivan Stadium on December 9 and 10, 1988. This count was taken on typical weekdays, and does not reflect operation of Sullivan Stadium or the Raceway. The actual count data shows that the 24-hour volume was 11,561 vehicles per day, and the AM peak hour occurred between 7:00 and 8:00 AM, and the PM peak hour occurred between 4:00 and 5:00 PM. A one-hour AM, and one-hour PM peak hour manual turning movement count at U.S. Route 1 and North Street on December 14, 1988.

Traffic operations were analyzed according to standard procedures and practices outlined in the 1985 Highway Capacity Manual.** The efficiency of traffic operations at a location (or changes to traffic operations) is measured in terms of Level of Service (LOS). The LOS refers to the quality of traffic flow along roadways and at intersections. It is described in terms of Levels A through F, where A represents the best possible condition and F represents forced-flow, or failing conditions. Generally, LOS C or better is considered acceptable, although in urban locations, LOS D is also acceptable. At signalized intersections, LOS is defined in terms of average approach delays. For unsignalized intersections, reserve capacities are used to determine LOS. These measures are summarized in Table 6.

Average delay measures the mean stopped delay experienced by vehicles entering a signalized intersection during the peak hour period. Average delay is measured for each individual approach and the intersection as a whole. The LOS provided deteriorates with increasing average delays.

* The current by-law for the S-1 district limits retail to 25% of total floor area. For purposes of the worst-case scenario projection, total retail is increased from 25% to 50% of total floor area because this comes closer to the retail/office mix ratio being considered for similar types of development.

** Transportation Research Board, Highway Capacity Manual, Special Report 209, 1985.

TABLE 5
S-1 DISTRICT BUILD-OUT/SEWAGE GENERATION ESTIMATES

	SCENARIO 1: Development of Stadium & <u>Raceway</u> (gpd)	SCENARIO 2: Development of Raceway, <u>Stadium Remains</u> (gpd)	SCENARIO 3: Both Stadium and Raceway <u>Remain</u> (gpd)
OFFICE:	456,923	320,543	215,526
RETAIL:	<u>101,538</u>	<u>71,232</u>	<u>47,895</u>
TOTAL WASTE GENERATION	558,461 gpd	391,775 gpd	263,421 gpd

* Title V Calculations

OFFICE: per 1,000 sq. ft.
RETAIL: per 1,000 sq. ft.

Wastewater Generation

75 gallons per day (gpd)
5 gpd

TABLE 6
INTERSECTION LEVEL OF SERVICE (LOS) DESIGNATIONS*

<u>Category</u>	<u>Description</u>	<u>Delay Range**</u> <u>(Seconds/Vehicle)</u>
LOS A:	Describes a condition of free flow, with low volumes and relatively high speeds. There is little or no reduction in maneuverability due to the presence of other vehicles, and drivers can maintain their desired speeds with little or no delay.	0.00 – 5.0
LOS B:	Describes a condition of stable flow, with desired operating speeds relatively unaffected, but with a slight deterioration of maneuverability within the traffic stream.	5.1 – 15.0
LOS C:	Describes a condition still representing stable flow but speeds and maneuverability begin to be restricted. The general level of comfort begins to deteriorate noticeably at this level.	15.1 – 25.0
LOS D:	Describes a high-density traffic condition approaching unstable flow. Speeds and maneuverability become more seriously restricted, and the driver experiences a poor level of comfort.	25.1 – 40.0
LOS E:	Represents conditions at or near the capacity of the capacity of the facility. Flow is usually unstable, and freedom to maneuver within the traffic stream can become difficult.	40.1 – 60.0
LOS F:	Describes forced flow or breakdown conditions with queuing along critical approaches. Operating conditions are highly unstable as characterized by erratic vehicle movements along each approach.	60.1 or greater

* Source: Transportation Research Board, Highway Capacity Manual, Special Report 209, 1985.

** Delay ranges relate to the mean stopped delay incurred by all vehicles entering the intersection and do not consider the effects of traffic signal coordination. This criteria is intended for use in the evaluation of signalized intersections.

o Existing Traffic Volumes and Operations

The following traffic volume flow maps show the AM/PM peak hour volumes collected in December 1988. The AM peak hour volume on Route 1 is 822 vehicles per hour (vph) northbound (NB), and 261 vph southbound (SB). The PM peak hour volume is roughly reversed with 302 vph (NB), and 753 vph (SB).

The 1988 existing level of service (LOS) for the AM/PM is C/C at U.S. Route 1 and North Street.

o 1995 Projected Traffic Volumes and Operations

In order to evaluate the traffic impacts of development in other sections of Town and the area, existing traffic volumes are normally projected to increased by 3% per year. Therefore, the 1995 volumes were increased by 23% as compared to the 1988 existing volumes.

The projected AM/PM level of service at Route 1 and North Street in 1995, without development in the S-1 District, would still be LOS C/C.

New traffic attributable to the S-1 District build out was estimated in a worst case scenario for 1995, where both the Stadium and Raceway are redeveloped and retail uses increased from 25% to 50% of total build-out. This was estimated on a daily and peak hour basis.* Another preliminary assumption this analysis uses is that 250,000 sf of new development will be absorbed each year in the S-1 District. The AM/PM peak hour trips, and daily trips for the expected build-out of 750,000 sf of office, and 750,000 sf of shopping center is shown in Table 7.

TABLE 7
TRAFFIC IMPACTS
1995 BUILD-OUT CONDITIONS

<u>Land Use</u>	<u>TOTAL VEHICLE TRIPS</u>				
	<u>AM In</u>	<u>AM Out</u>	<u>PM In</u>	<u>PM Out</u>	<u>24-Hour</u>
Retail (750,000 sf)	410	175	1,089	1,227	26,674
Office (750,000 sf)	<u>987</u>	<u>147</u>	<u>168</u>	<u>880</u>	<u>6,218</u>
TOTAL (1,500,000 sf)	1,397	322	1,257	2,107	32,892

* Institute of Traffic Engineers, Trip Generation Manual, 4th Edition, 1987.

Total vehicle trips for the 1995 build-out conditions were distributed to Route 1 based upon current peak hour directional splits. The directional distribution was:

North to Boston on U.S. Route 1	=	15%
South to I-495 on U.S. Route 1	=	75%
East on North Street	=	5%
West on North Street	=	5%

The projected 1995 AM/PM Build level of service (LOS) for U.S. Route 1 at North Street is projected at C/D. Improvements would, therefore, not be needed at Route 1/North Street for the development of 750,000 sf of retail and 750,000 sf of office uses. HMM did not analyze the impacts to Route 1 at I-495, or any other locations.

o 2008 Projected Traffic Volumes and Operations

HMM assumed background traffic volumes to increase by 3% per year. Therefore, the 2008 volumes are increased by 80.61% as compared to 1988 existing volumes. The projected AM/PM level of service at Route 1 at North Street in 2008, without development of the S-1 District, will fall to LOS E/C.

New traffic attributable to the S-1 District was estimated on a daily and peak hour basis, using the ITE Trip Generation Manual, 4th Edition (1987). The AM/PM peak hour trips, and daily trips for the expected build-out of 2,375,000 sf of retail and 2,375,000 sf of office, is shown in Table 8. The same absorption rate of 250,000 sf per year was used.

TABLE 8
TRAFFIC IMPACTS
2008 BUILD-OUT CONDITIONS

<u>Land Use</u>	<u>TOTAL VEHICLE TRIPS</u>				
	<u>AM In</u>	<u>AM Out</u>	<u>PM In</u>	<u>PM Out</u>	<u>24-Hour</u>
Retail (2,375,000 sf)	818	351	3,059	3,450	70,662
Office (2,375,000 sf)	<u>2,658</u>	<u>397</u>	<u>436</u>	<u>2,292</u>	<u>14,758</u>
TOTAL (4,750,000 sf)	3,476	748	3,495	5,742	84,420

Total vehicle trips were distributed to Route 1 as follows:

North to Boston on U.S. Route 1	=	15%
South to I-495 on U.S. Route 1	=	75%
East on North Street	=	5%
West on North Street	=	5%

The projected 2008 AM/PM Build level of service (LOS) for Route 1 at North Street is projected at F/F. HMM expects that around 1996 or 1997, the road improvements described in the following section will be necessary to support development of the S-1 District at that time.

The level of service summary for each development scenario is shown on Table 9.

Order of Magnitude Cost Estimate

Typically, the cost of highway design, construction, and right-of-way costs approximates \$1,000,000 per lane-mile. Also, new traffic signal installations each costs roughly \$85,000. We expect that the total cost to widen Route 1 to six lanes, add turning lanes to Route 1 at North Street, and resignalize that location will cost approximately \$5,000,000 (1989 dollars).

o Sullivan Stadium Parking Requirements

PARKING DEMAND

The sellout capacity of Sullivan Stadium is 60,000 persons. Assuming an additional 400 employees, the total parking demand is estimated to be 16,271 vehicles (as shown on Table 10). This includes 16,171 conventional parking spaces and 100 bus parking spaces.

PARKING SUPPLY

In a previous study completed by HMM in 1985 for the owners of Sullivan Stadium,* HMM identified the size and condition of each parking area at the stadium. The parking areas surface conditions ranged from paved and in good condition to unpaved and in need of significant improvements. The parking densities for each condition are described in Table 11.

The location of existing parking areas for Sullivan Stadium is shown on Figure 4. The size and parking conditions for each area are shown in Table 12. These areas were used to estimate the number of spaces currently available.

* Parking Consolidation Safety Improvements and Traffic Management at Sullivan Stadium, prepared by HMM Associates, Inc., May 28, 1985.

TABLE 9
LEVEL OF SERVICE SUMMARY

<u>Intersection</u>	1988 AM/PM <u>Existing</u>	1995 AM/PM <u>No-Build</u>	1995 AM/PM <u>Build</u>	2008 AM/PM <u>No-Build</u>	2008 AM/PM <u>Build</u>
Route 1 at North Street	C 18.5 C 17.0	C 20.2 C 16.6	C 19.8 D 25.8	E 50.3 C 23.8	F 679.4 F 943.8
Route 1 at North Street (Improvement 1)	NS NS	NS NS	NS NS	NS NS	D 32.5 D 30.6

NS = Not Studied

* Improvement 1 = Add right-turn lane on EB North Street.
Add second left-turn lane on NB U.S. Route 1.
Add third through lane on NB and SB U.S. Route 1.
Revise signal timing and phasing.

TABLE 10
SULLIVAN STADIUM
PARKING SPACE DEMAND

<u>Arrival Type</u>	<u>Parking Space Demand</u>	<u>Persons</u>
Bus Arrivals (100 buses at 40 persons/bus)	100	4,000
MBTA Train Arrivals (previous 1988 MBTA data)	0	800
Employee Arrivals (1 employee/car)	400	400
Auto Arrivals (3.5 persons/car)*	<u>15,771</u>	<u>55,200</u>
TOTAL	16,271	60,400

* Parking Principles, Highway Research Board, Special Report 125, 1971.

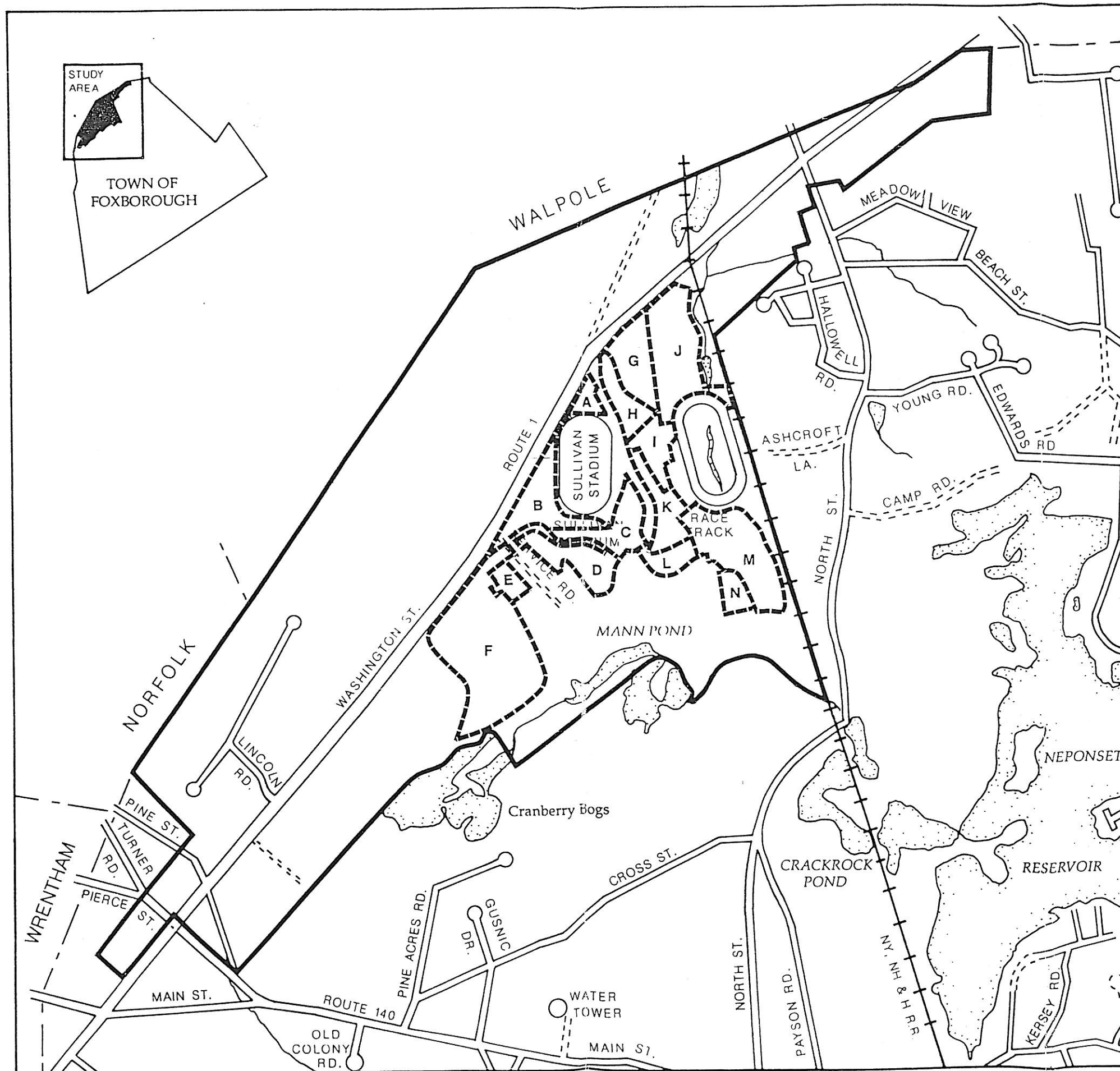
TABLE 11
SULLIVAN STADIUM
PARKING CONDITION DENSITY

Condition 1:	Paved, Good Condition	1 vehicle/325 square feet
Condition 2:	Paved, Poor Condition	1 vehicle/350 square feet
Condition 3:	Unpaved, Well Graded	1 vehicle/425 square feet
Condition 4:	Unpaved, Poorly Graded	1 vehicle/425 square feet

TOWN OF FOXBOROUGH

SPECIAL USE (S-1) ZONING DISTRICT MANAGEMENT PLAN

FIGURE 4 SULLIVAN STADIUM PARKING AREAS



Special Use Zoning
District Boundary

SCALE IN FEET
0 800 1600

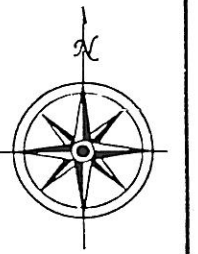


TABLE 12
SULLIVAN STADIUM
INVENTORY OF EXISTING PARKING AREAS*

<u>Parking Area**</u>	<u>Condition 1 Area (SF)</u>	<u>Condition 2 Area (SF)</u>	<u>Condition 3 Area (SF)</u>	<u>Condition 4 Area (SF)</u>
A	111,360			
B	237,440			
C		432,000		
D		304,000		
E				Not in Use
F				1,382,400
G	375,600			
H		208,000		
I	231,680			
J			573,440	
K	227,840			
L		142,720		
M		609,280		
N				Not in Use
O				<u>485,240</u>
Total SF	1,183,920	1,696,000	573,440	1,867,640
Density/ Space	325	350	425	425
Total Spaces Available	3,643 +	4,846 +	1,349 +	4,394 = 14,232

* Based on 1985 HMM Parking Study for the Owners of Sullivan Stadium.

** See Figure 4 for location of sub-areas identified.

According to the above 1985 data, HMM found that the demand was for 16,271 spaces, while the current supply was only 14,232 spaces. Therefore, there was a shortfall of 2,039 spaces. We believe the parking needs situation described in 1985 continues to exist today.

Pedestrian Access

Pedestrian access will be enhanced by a comprehensive system of signage. Pedestrian safety will be improved if the number of parking spaces on-site are increased. This will reduce the number of pedestrians who will walk along the shoulders of Route 1. If safe and attractive parking spaces are provided contiguous to the Stadium, it is assumed that few people will choose to use the satellite lots.

Rail Access

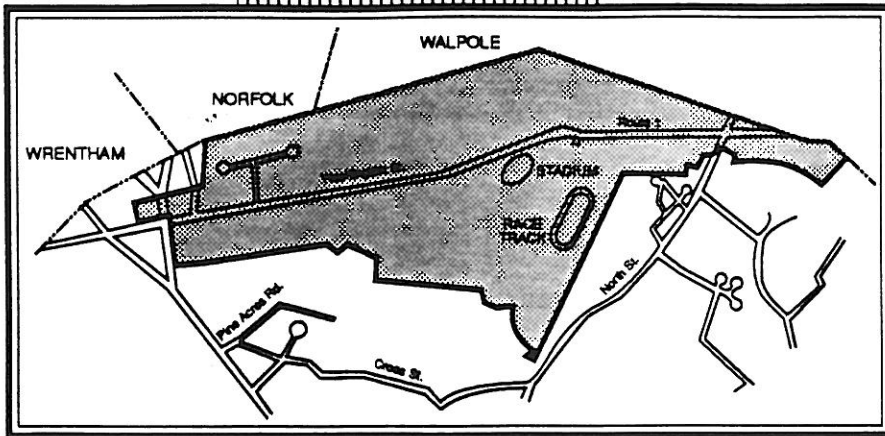
There is special train service for the eight home football games at Sullivan Stadium. The train leaves South Station at 11:15 AM on game Sundays, and arrives at Sullivan Stadium at 12:15 PM, approximately forty-five minutes before kickoff. The train departs the Stadium five minutes after the end of the game and returns to South Station. The train's seated capacity is roughly 891 persons (9 cars at 99 persons/car) per train. Ridership figures for the 1988 season range from a low of 572 persons/train, to a high of 940 persons/train. The roundtrip fare is \$6.00, and the train stops are at Norwood Central, Readville, Back Bay, and South Station. There are 160 parking spaces at the Readville Station, and 360 parking spaces at the Norwood Central Station. Riders can connect to the Red and Orange lines of the MBTA system at South Station and the Back Bay Station. The MBTA plans to continue this special service, and can add a second train if the demand so warrants. The MBTA suggests that the Sullivan Stadium advertise the train service on the Stadium scoreboard, and also on local radio to help promote ridership.

The positive aspects of promoting ridership on the MBTA event train are:

- Reduced Highway Congestion on Route 1
- Reduced Parking Demand
- Improved Pedestrian Safety (since pedestrians need not cross Route 1 to get to the Station)

Some negative aspects are:

- Reduced Parking Revenues
- Inflexible Arrival/Departure Schedule



3.0 GROWTH MANAGEMENT CONTROLS

3.0 GROWTH MANAGEMENT CONTROLS

3.1 Introduction

On the May 11, 1989, Foxborough Town Meeting, the Town adopted comprehensive zoning by-law revisions for the S-1 District. Based on extensive and detailed review with the Town's Growth Management Committee and the Planning Administrator, the preferred approach was to modify the existing by-law (more fully described in Section 5.0).

The consultant team presented three options to control growth in the S-1 District to the Growth Management Committee during the course of the study. These included creation of an interim zoning overlay district (Option #1), incentive zoning (Option #2), and modifications to the existing zoning by-laws (Option #3). All of these options addressed in some way the Town's goals and objectives for the S-1 District, as was understood by the consultant team, Option #3 comes closest to those by-law revisions adopted by Town Meeting in May, 1989. However, some of Option #3's recommendations (i.e., establishment of a two-stage Planned Development Area Procedure) were not submitted for adoption by the Growth Management Committee at the May meeting.

The following section describes the three options and identifies communities where such approaches have been adopted, if appropriate.

3.2 Growth Management Control Options

- o Option #1: Interim Zoning Overlay District (IZOD)

The IZOD is a special permit overlay district which would stay in effect for a maximum of two years, during which time the community would engage in a long-term planning process which would provide the basis for final (permanent) zoning.

The overlay district would exist in conjunction with permanent zoning which would mean that developers would have to get an IZOD special permit in addition to the permits that are already required by the existing (underlying) zoning by-law. The IZOD could provide that certain uses, in addition to those already prohibited by the existing by-law, could be prohibited. It also could include an impact fee system, as described later.

This planning/zoning concept is presented since Foxborough's current planning takes place within an atmosphere where the final outcome of the Sullivan Stadium/Patriots is not clear (i.e., the Patriots may stay/move, other sporting or accessory uses may be considered by the new owners, and the future use for the raceway is not known). A principal advantage of the IZOD is that it would allow for a flexible discretionary review process. This concept also assumes that over a two-year "interim" planning period some of the outstanding planning issues would be resolved, and growth management controls more appropriate to a preferred development scenario would be finalized.

Both Boston and Somerville have used this approach in their zoning.

o Option #2: Incentive Zoning

Incentive zoning is a regulatory mechanism whereby a developer provides a community with a public benefit (either on-site or off-site), such as open space, traffic improvements, new fire station, etc., in exchange for permission from a community to build a project that is larger (more dense) than that which would otherwise be permitted under existing zoning regulations. Currently the Town's PDA/Business Zoning District with a 5-acre minimum lot size is the only mechanism by which increased density may be granted (but this language is unclear in the present regulations).

Under the incentive zoning approach, developer participation is voluntary and not required for an as-of-right project.

Incentive zoning is being used in Newton, Cambridge, Boston, and Nantucket as a mechanism to promote affordable housing.

o Option #3: Modifications to the Existing Zoning By-Laws

If the general objectives and goals of the Growth Management Committee are to establish greater control over the uses and dimensional regulations of the S-1 District, it is appropriate to present a planning/zoning concept which focuses on modifications to the existing zoning by-law. (The consultants have also included recommended changes to bring some of the regulations into conformity with current zoning practice in Massachusetts.)

a) Site Plan Review Procedures (Section 200.7, Site Plan Review, Pages 51-56)

The existing by-law specifies that a site plan shall be submitted to the Board of Selectmen prior to issuance of a building or demolition permit, and that the Selectmen, after public hearing and advice from the Site Plan Review Board, shall have the discretion to deny approval of a site plan and require a resubmission.

In this option, the Planning Board is made responsible for approvals of any site plan in the S-1 District. As the primary reviewing board, the Planning Board is best able to assure that the Site Plan Review Checklist is fully considered. Providing the Planning Board with Site Plan Review authority is also consistent with actions in other towns throughout the Commonwealth.

To further strengthen the role of the Planning Board, the Site Plan Review Checklist (Section 200.7(E)) could be amended to add new sections - No. 22 - natural, historic, and scenic areas be protected and No. 23 - fiscal impacts on the infrastructure systems of the Town be considered. This would establish more operational standards for the site plan review process.

b) Substitute Special Permit (SP) for Special Use Permit (SUP) Requirements in the S-1 District

As described earlier, Special Use Permits (SUP) granted by the Board of Appeals are currently required for the following uses within the S-1 District:

- Stadiums
- Private Schools/Profit (with some exclusions)
- Hospitals, Nursing Homes
- Public Utilities
- Clubs, Golf, Country
- Recreation/Non-Profit
- Recreation/Profit

To insure that the granting of these above uses are consistent with those goals and objectives for the S-1 District (described above), they could be subject to Special Permit which, under the existing by-law, is granted by the Planning Board. This would assure tighter planning controls, and the use of planning considerations as a major basis for granting approval.

c) Require That Stadium Uses Be Subject to a Two-Stage Planned Development Area Procedure

Stadium uses now require Special Use Permits (SUP) which are currently granted by the Board of Appeal. To provide for better planning control over future development of the Sullivan Stadium and associated areas, new development within the Sullivan Stadium parcel could be subject to a two-stage development review procedure. Initially, any proposal would be required to file a Master Plan concept with the Town to show how the proposal relates to an overall development concept. Following acceptance by the Planning Board of the overall concept, the project could then be subject to a Special Permit to be granted by the Planning Board. The new Planned Development Area for stadiums could have specific density, aesthetic, traffic, open space, and environmental requirements which could be specified in the by-law amendment.

d) Modify Use and Limitations (Dimensional) Provisions for the S-1 District

Based on discussions with the Town's Planning Administrator and the Growth Management Committee, use and dimensional provisions in the S-1 District could be modified in the following manner:

- Medium hazard uses which are permitted in the S-1 District could be allowed only by Special Permit to assure greater review of potential impacts.
- Self-storage/mini-warehouse uses which are now permitted could be prohibited to gain more control over potential impact issues (i.e., traffic, etc.) and give a more positive image to the S-1 District.
- Automobile storage and auctions, rail storage, and possibly other noxious uses now permitted could be prohibited to give a more positive image to the S-1 District.
- Reduce maximum lot coverage, including accessory structures (as provided in Schedule A) of the Zoning By-laws from 40% (building only) to 70% which will include all impervious surfaces. This would limit density and allow sufficient frontage and other yard setbacks to insure conformity to good site planning principles. This, in turn, would meet the Growth Management Committee's planning goals and objectives for the S-1 District.
- Increase the percentage of retail uses (of total build-out) allowed from 25% to a percentage to be determined. Such an increase, in combination with reduction in lot coverage, would provide for greater flexibility for a mixed-use development concept.

3.3 Impact Fees

Impact fees are normally established in order to compensate a municipality for the cost of providing specific services, and not to raise general revenues. It is a regulatory mechanism of deriving public benefits from an "as-of-right" development. Few Massachusetts towns have actually adopted impact fees, although it has been widely used in other states such as Florida. Massachusetts has not as yet adopted direct statutory authority to create such a fee system. From the Florida impact fee case standards, the methodology required to establish a legally defensible impact fee system includes the following:

- o The municipality should establish a capital budget program to:
 - Justify the need for the specific improvement;
 - Determine a realistic cost for the improvement;
- o Develop a fair and reasonable cost allocation method to share the costs equitably;
- o Establish a separate or so called "enterprise" fund to hold the fees until spent; and
- o Build the facility or improvement necessitated by the development within a reasonable time* or return the funds to the developer.

* Some attorneys have suggested five-years as being the length of time for a reasonable Capital Improvements Program.

3.4 Growth Management Controls: Analysis and Recommendations

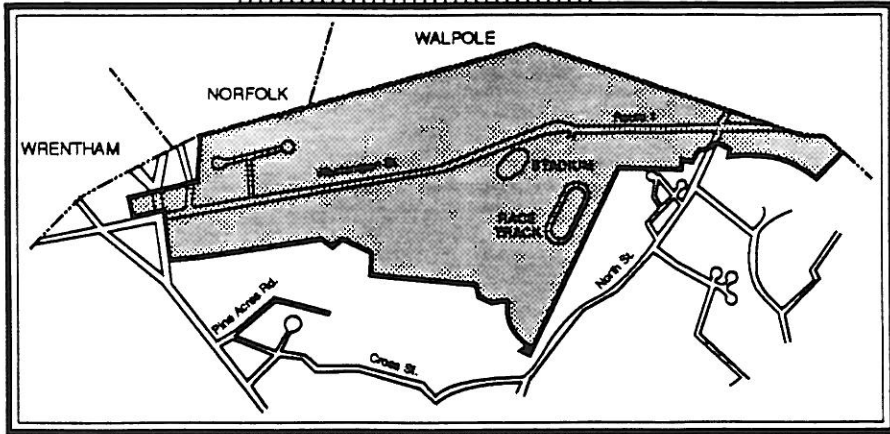
The three growth management options described in the preceding sections were not necessarily presented as exclusive approaches to addressing the growth issues for the S-1 District. For example, even though the Town opted to initiate modifications to the existing by-laws, it could also adopt interim or incentive controls as well. In other words, there could be some mixing and matching of growth management approaches.

During the course of this study, the consultants evaluated the positive aspects of the interim (Option #1) and incentive (Option #2) zoning approaches. Each, however, had an important shortcoming. The interim zoning suspends all or part of permanent zoning during the interim planning period (up to two years) and requires the Town to commit time and financial resources to evaluate the manner in which the interim zoning is working and the modifications needed to establish permanent zoning. This option then suspended a final growth management control approach for up to two years which was considered to be an important disadvantage by the Town's Growth Management Committee.

The incentive zoning approach looked to receive benefits from developers in exchange for square feet developed above an "as-of-right" threshold (or minimum). But it was felt that the increased density might not be acceptable to nearby residential uses which might object to the Town's trading increased density for greater benefits.

The proposed modifications to the existing by-laws (Option #3) could be initiated immediately. It required modifications to a number of sections of the existing by-law. The consultants recommended that this option should be considered initially by the Town because it would put strong land use and zoning controls in place in the short-term, which was felt to be important to the Town and Growth Management Committee.

The use of impact fees was a permanent measure and required that "as-of-right" uses provide the Town compensation for the added impacts caused by the development. It was a system that must be very carefully constructed and controlled by the municipality in order to be legally defensible and meet any court challenge. This study presented the type of data and analysis to lead to an impact fee system, but additional analysis that goes beyond our study's work program was felt to be needed before such a system is implemented. Such a system would also require adoption of state enabling legislation to assure that the impact fee system will be legally defensible.



4.0
RECOMMENDED SPECIAL USE
(S-1) ZONING DISTRICT
MANAGEMENT PLAN

4.0 RECOMMENDED SPECIAL USE (S-1) ZONING DISTRICT MANAGEMENT PLAN

4.1 Regulatory Controls

4.1.1 Route 1 Town Well

SEA Consultants' Zone II Delineation Study recommended amendments to the Water Resources Protection District By-Law. These amendments were adopted at the May 1989 Town Meeting (Appendix B). The purpose of the Water Resource Protection District is to protect the public health, safety, and general welfare of the community by:

- a) Preserving and maintaining the existing and potential groundwater supplies, aquifers, and groundwater recharge areas of the Town, and protecting them from adverse development or land-use practices;
- b) Preserving and protecting present and potential sources of drinking water supply for the public health and safety;
- c) Conserving the natural resources of the Town; and
- d) Preventing blight upon and/or pollution of the environment.

4.1.2 Special Use (S-1) Zoning District

The Town adopted numerous modifications and revisions to the Zoning By-Laws at the May 1989 Town Meeting. These amendments established growth controls in the S-1 District (see Section 5.0, Implementation Strategy: By-Law Revisions).

4.2 Traffic Improvement Plan

Recommended Roadway Improvements

We expect that by 1996 or 1997, the following road improvements may be necessary to support further development of the S-1 Zoning District:

- o Widen U.S. Route 1 to a six-lane divided highway from I-495 to North Street.
- o Add a free-flow right-turn lane on eastbound North Street.
- o Add a second left-turn lane on northbound U.S. Route 1.
- o Revise signal phasing and increase signal cycle at U.S. Route 1 at North Street.

The proposed AM/PM level of service after implementation of these improvements at Route 1 and North Street will be LOS D/D. Since the number and location of site driveways is unknown at this time, this study cannot address the lane requirements for each entrance-way. However, from our experience, we feel that dual left-turn lanes on U.S. Route 1 will be required, and free right-turn lanes into each entrance-way will also be required.

Order of Magnitude Cost Estimate

Typically, the cost of highway design, construction, and right-of-way costs approximates \$1,000,000 per lane-mile. Also, new traffic signal installations cost roughly \$85,000. We expect that the total cost to widen Route 1 to six lanes, add turning lanes to Route 1 at North Street, and resignalize that location will be approximately \$5,000,000 (in 1989 dollars).

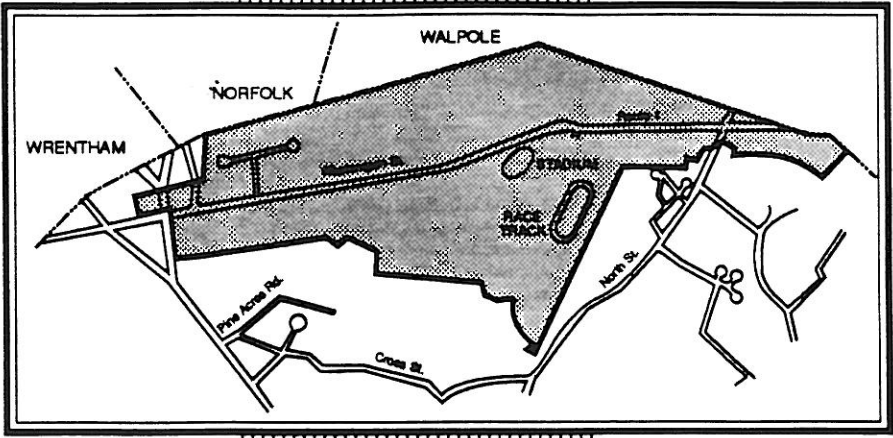
4.2.1 N.F.L. Sullivan Stadium Parking Plan

An estimated shortfall of 2,000 parking spaces exists at Sullivan Stadium. This situation has resulted in pedestrian congestion along Route 1 as patrons park further away and walk along the shoulders of Route 1. Satellite parking lots located near I-95 and Route 1 by Route 128 with shuttle-bus service to the stadium would alleviate parking demand, pedestrian, and traffic congestion on Route 1 by the stadium. A traffic distribution and origin analysis should be performed to determine the proper locations for satellite parking lots.

4.3 Capital Improvements Plan/Water System

Existing water pressures in the S-1 District are presently considered adequate. However, improvements to the system are needed.

Existing water pipes along Route 1 in the S-1 District are a combination of 12", 10", and 8". To increase water pressure and flow along Route 1, consistent pipe diameters are needed. A study conducted by Whitman & Howard, Inc. detailed the replacement of 10" and 8" pipes from the Route 140 stand pipe to the Route 1 12" line at Route 1 and North Street. This system improvement project was estimated by Whitman and Howard to cost between \$500,000 - \$600,000. Although this project is not a priority of the Water Commission, construction was determined to be needed within the next five years.



5.0
IMPLEMENTATION STRATEGY:
BY-LAWS REVISIONS

5.0 IMPLEMENTATION STRATEGY: BY-LAW REVISIONS

HMM Associates and Edith Netter & Associates prepared and drafted Zoning By-Law Amendments for the S-1 Zoning District. Three public meetings were held with the Growth Management Study in drafting the regulations. These zoning amendments were developed to meet the S-1 District goals and objectives as follows:

- 1) Promote economic development of the Route 1 Corridor and increase real estate tax revenues.
- 2) Maintain good planning and site review principles for new development proposals (i.e., encourage commercial cluster development approaches (PD), reinforce front yard buffers, provide performance standards and more definitive criteria for the Special Permit process, etc.).
- 3) Promote better land uses (i.e., professional office/r&d uses) along the Route 1 Corridor, and discourage strip (or "ribbon") type development.
- 4) Enhance environmental protection and preservation, and preserve Town's rural character.
- 5) Minimize the number of access points onto Route 1 to reduce traffic impacts.
- 6) Minimize demands placed on Town services and infrastructure.
- 7) Implement proper procedures to assure that future development of the Sullivan Stadium and Foxborough Harness Raceway will be completed in accordance with the above planning objectives, and others to be considered that are focused on Stadium uses.

ZONING BY-LAW AMENDMENT FOR (S-1) ZONING DISTRICT ADOPTED BY FOXBOROUGH TOWN MEETING ON MAY 11, 1989

- Amend Section 105.2. Types of Districts, paragraph D, by adding the following text at the end of the existing paragraph, "The planning objectives and goals for this district are as follows:
 - 1) To promote economic development of the Route One Corridor and increase real estate tax revenues;
 - 2) To maintain good planning and site review principles for new development proposals (i.e., encourage commercial cluster development approaches (PD), reinforce front yard buffers, provide performance standards and more definitive criteria for the Special Permit process, etc.);
 - 3) To attract better land uses (i.e., Professional Office/R&D users) along the Route One Corridor, and discourage strip (or "ribbon") type commercial development;

- 4) To assure environmental protection and preservation, and to preserve Town's rural character;
 - 5) To minimize the number of access points onto Route One to lessen traffic congestion;
 - 6) To minimize development demands placed on Town services and infrastructure; and
 - 7) To implement proper procedures to assure that future development of the Sullivan Stadium and Foxborough Harness Raceway will be completed in accordance with the above planning objectives, and others to be considered that are compatible with Stadium uses."
- Amend Section 201.4 Permitted Uses - Table 2-5, as follow:
 - o Medium hazard uses which are now permitted (P) in the S-1 District should be changed to Special Permit (SP).
 - o Industrial uses now permitted (P) in the S-1 District should be changed to Special Permit (SP).
 - o Low hazard uses now permitted (P) in the S-1 District should be changed to Special Permit (SP).
 - Amend Section 201.4 Permitted Uses - Table 2-5, to provide that the following uses in the S-1 District now requiring Special Use Permits (SUP) granted by the Board of Appeals should be changed to Special Permit (SP). These uses include:
 - o Stadiums
 - o Private Schools/Profit (excluding tractor trailers, daycare centers, and nurseries)
 - o Hospitals, Nursing Homes
 - o Public Utilities
 - o Clubs, Golf, Country
 - o Recreation/Non-Profit
 - o Recreation/Profit
 - Amend Section 201.4 Permitted Uses - Table 2-5, under the Mercantile/Retail group and add a new listing "#16". The text should be placed as listing #16 in Section 201.4 Permitted uses as follows:
 - o "Automobile storage uses and automobile auctions as primary uses are not permitted in the S-1 District."

- Amend Section 201.4 Permitted Uses - Table 2-5, under Medium Hazard Use group and by adding a new listing in "#17". The text should read as follows and be placed as listing #17 in Section 201.4 Permitted Uses:
 - o "Rail storage yards are not permitted in the S-1 District."

- Amend Section 201.4 Permitted Uses - Table 2-5, under the Industrial Use group by adding a new listing "#18". The text should be placed as listing #18 in Section 201.4 Permitted Uses as follows:
 - o "Mini self-storage warehouses are not permitted in the S-1 District".

- Amend Section 201.4 Permitted Uses - Table 2-5, under the Industrial Use group by adding a new listing "#19" and by adding the text below to Section 201.4 Permitted Uses.
 - o "General commodity/public warehouse/truck terminal as defined below shall not be permitted in the S-1 District."

- Amend Section 104.5 Definitions by adding the following definition after the words Garage, Public, "General commodity/public warehouse/truck terminal: a facility/use whose primary purpose is to distribute or prepare for distribution a wide variety of merchandise, goods, and/or other products via trucks, and including those facilities designed to store such products in preparation for shipping and where such products are generally not made available for retail sale. The storage of tractor trailers, trucks or trailers as a primary use."

- Amend Section 201.4 Permitted Uses, Item "#15", by adding the following text to the end of the existing text: "Land Parcels five acres or less in existence prior to March 23, 1989 are allowed to have 50% of the total floor area used for retail".

- Amend Schedule A - Limitations for Business and Industrial Uses, for minimum lot area; Minimum Frontage; Minimum Front in feet, Dimensions Side in feet, Maximum Building Height; and Maximum Coverage Lot including Accessory Structure in %, with specific changes as follows:
 - o Increase minimum lot area from "60,000" sf to "80,000" sf in the S-1 District for frontage on Route One.
 - o Under "Minimum Frontage" in the S-1 District for frontage on Route One, change the figures "200'" to "300'", and for Subdivisions off Route One from 50' to 200'.

- o Under "Dimensions Side Yard", change the figure "50'" to "75'(c)" in the S-1 District for frontage on Route One. At the bottom of the schedule place a new letter "(c)" with the following text: "This requirement may be waived pursuant to Section 201.3G Planned Development Special Use District".
 - o Under the heading, "Maximum Coverage Lot, including Accessory Structures, in %" place a new letter "(b)" in the heading and change the existing figure of "40%" to "70%". At the bottom of the Schedule place a new letter "(b)" with the following text, "In the S-1 District this percentage is for total impervious area allowed on a lot."
- Amend Section 200.2 Building Height, paragraph B, after the words, "In any business or industrial district...." add the text, "except the Special Use (S-1) district". Also add the following sentence to the end of the existing text, "In the S-1 District no structure shall exceed 40 feet except those which occur within a Planned Development and which receive a Special permit."
 - Amend Section 200.6 Screening and/or Buffers to add a new Section "F", with the following text to be included therein, "There shall be a landscaped buffer strip comprising a minimum of 50 feet of the front yard and 25 feet of the side yard for all uses in the S-1 District. Under no circumstances shall any parking be allowed within these required buffer zones. These requirements may not be waived. Insofar as there may be inconsistencies with Section 200.6.C.1, the provisions of this Section (200.6.F) shall apply in the S-1 District in all cases".
 - Amend the Site Plan Review Checklist, Section 200.7.E, to add new listings "#22", "#23", and "#24", with the accompanying text as follow:
 - "22. Protection of natural, historic and scenic areas."
 - "23. Impacts on the infrastructure (i.e., water, sewer, roads) systems of the Town."
 - "24. Fiscal impacts on the Town facilities and services."
 - Amend Section 103.3 Special Permits by adding a new Section; "J Special Permit: Development within the S-1 District" with the new text as follow:

"Applicants seeking Special Permits in the S-1 District shall comply with the following standards and requirements. Section 200.7 Site Plan Review, shall not apply to any proposal which receives a Special Permit within the S-1 Zoning District".

- 1) The Board shall obtain with each submission a deposit sufficient to cover any expenses connected with the public hearing and review of the plans. The Planning Board is authorized to retain a registered professional engineer, architect, or landscape architect, or other professional consultant to advise the Board on any or all aspects of the site plan. The cost of this advice shall be borne by the applicant.
- 2) Prior to the required public hearing before the Special Permit Granting Authority the applicant shall meet informally with the Board of Selectmen. The Board of Selectmen shall present its comments to the Planning Board before the Public Hearing date.
- 3) The development shall be integrated into the existing terrain and surrounding landscape. Building sites shall, to the extent feasible:
 - a) Minimize use of wetlands, steep slopes, floodplains, hilltops;
 - b) Preserve natural or historic features;
 - c) Maximize open space retention;
 - d) Minimize obstruction of scenic views from publicly accessible locations;
 - e) Minimize tree, vegetation and soil removal, blasting and grade changes; and
 - f) Screen objectionable features from neighboring properties and roadways.
- 4) The development shall be served with adequate water supply and waste disposal systems. If the lot falls within the Water Resource Protection District, the Special Permit request shall state such. The criteria necessary for the granting of this Special Permit under Section 105.2G shall apply and be incorporated into the design of the plan. The Special Permit granted shall fulfill the requirements of both sections and shall be noted as such by the SPGA.
- 5) The development shall incorporate measures that are adequate to prevent pollution of surface or groundwater, to minimize erosion and sedimentation, and to prevent changes in groundwater levels, increased rates of run-off and potential for flooding. Drainage shall be designed so that peak flow rates shall not be increased above pre-development levels, and groundwater recharge is maximized.
- 6) To the extent feasible, development shall minimize demands placed on Town services and infrastructure.
- 7) The development shall maximize the convenience and safety of vehicular and pedestrian movement within the site and in relation to adjacent ways.

- 8) Building design and landscaping shall be in harmony with the prevailing character and scale of buildings in the neighborhood through the use of appropriate building materials, screening, and other architectural techniques. Variation in detail, form and siting shall be used to provide visual interest and avoid monotony. Proposed buildings shall relate harmoniously to one another.
- 9) Electric, telephone, cable TV and other such utilities shall be underground except where this cannot be accomplished because it is physically or environmentally infeasible, in which case a waiver from such will be requested by the applicant.
- 10) Exposed storage areas, machinery, service areas, truck loading areas, utility buildings and structures and other unsightly uses shall be set back and/or screened to protect neighbors from objectionable features.
- 11) The Planning Board may require that the principal access road be laid out and constructed in accordance with Town standards, as listed in the Rules and Regulations Relating to the Subdivision of Land, Town of Foxborough (Revised: November 1987).
- 12) Buildings shall be sited so that obstruction of views from the public ways will be minimized.
- 13) No land use or establishment shall be permitted to produce a strong, dazzling light or reflection of that light beyond its lot lines onto neighboring properties, or onto any town way so as to impair the vision of the driver of any vehicle upon that town way. All such activities shall also comply with applicable Federal and State regulations.
- 14) Excessive noise at unreasonable hours shall be required to be muffled so as not to be objectionable due to intermittance, beat frequency, shrillness, or volume.
- 15) To the extent feasible, common driveways shall be encouraged.
- 16) Parking lots loading area regulations. Side yard requirement may be waived provided that: (1) the 25 foot buffer is maintained; and (2) the total of both side yards equals or exceeds 150'. Parking is allowed in the front yard provided that a 50' buffer strip and 75' minimum building set back are provided. Side and rear yard parking is preferred.

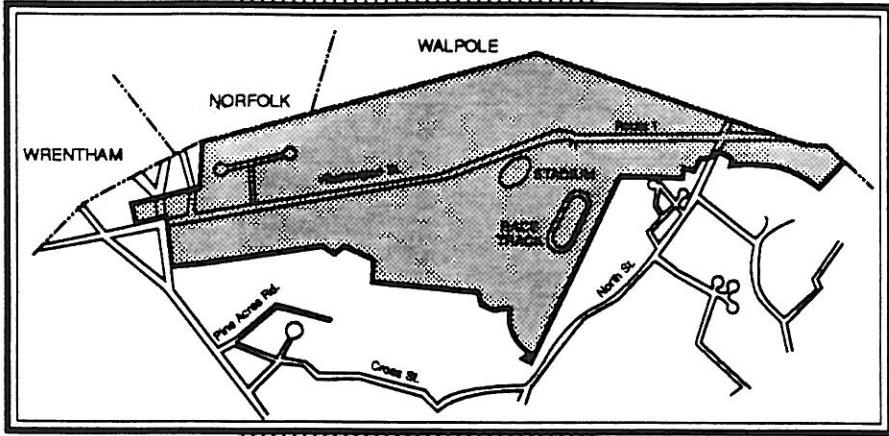
- Amend Section 201.3, Planned Developments, by adding a new Section; "G, Planned Development Special Use District (PD/S-1)". The following text shall be included under this heading:

- 1) Any use or uses permitted As-of-Right or by Special Permit may be included in a PD/S-1 District.

- 2) All of the criteria found in Section 103.3.J, and Schedule "C", of these by-laws shall apply to all applications for Planned Developments.
- 3) Applicants for a PD/S-1 must seek a Special Permit from the SPGA and meet informally with the Board of Selectmen to seek its recommendation on the project.
- 4) The following regulations and restrictions apply to all PD/S-1 Developments:
 - o Height: The maximum height allowed is 60 feet. (This allows for increased density through a 20-foot height bonus over the proposed 40-foot height maximum in the S-1 District.
 - o Retail: The percentage of mercantile/retail uses allowed is be established at fifty (50) percent of gross floor area of all of the structures combined. All retail use may occur in one structure provided that the 50% limit for the entire P.D. is not exceeded. (This provides for greater flexibility for the developer over the 25% retail limit currently within the S-1 District.)
 - o Lot Size: Minimum lot size is five (5) acres.
 - o Lot Coverage: Maximum impervious surface coverage is 70%. Density increases may occur by allowing greater height.
 - o Lot Lines: No requirements.
 - o All other dimensional and use requirements do not apply in the PD/S-1 except as provided for in the Special Permit Rules and Regulations.
 - o The only PD permitted in the S-1 District is the PD/S-1.
 - o Increases to dimensional and use requirements such as increases in height and density may be provided in exchange for the Applicant creating a project that is designed in such a manner as to maximize benefits to the Town such as well-designed landscaping, common driveways, and design that is in harmony with the topography and the natural environment, and minimizes impact on infrastructure.
 - o Parking lots loading area regulations. Side yard requirement may be waived provided that: (1) the 25 foot buffer is maintained; and (2) the total of both side yards equals or exceeds 150'. Parking is allowed in the front yard provided that a 50' buffer strip and 75' minimum building set back are provided. Side and rear yard parking is preferred.

- Amend Schedule C, Limitations for Planned Developments, by adding a new heading under the word type; "PD-Special Use District". Under the heading Minimum Acres place the figure "5", under the heading Minimum Frontage in feet, place the figure "60" and under the heading Minimum Open Space/Percent of Gross Area, place the figure "30%".

- Amend Section 103.3 Special Permits, paragraph D, by adding the following text to the end of the existing paragraph: "Planned Developments/Special Use District shall specifically conform to the Design and Construction Standards (Sections 304 and 305 of the Rules and Regulations Relating to Subdivision of Land, Town of Foxborough). However, PD/S-1 Developments do not have to seek an approval pursuant to MGL Chapter 41.



APPENDIX

APPENDIX A

PRELIMINARY NON-RESIDENTIAL BUILD-OUT ASSUMPTIONS
METROPOLITAN AREA PLANNING COUNCIL (MAPC)
JUNE 1988



Metropolitan Area Planning Council

110 Tremont Street Boston, Massachusetts 02108 (617)-451-2770

Serving 101 Cities & Towns in Metropolitan Boston

PRELIMINARY RESULTS OF THE NON-RESIDENTIAL BUILD-OUT ANALYSIS

Presented to the Foxborough Growth Policy Committee
for Review and Comment June 23, 1988

- 1) NOTES: Preliminary Results of the Non-Residential Build-Out Analysis.
- 2) CHART: Preliminary Results of the Non-Residential Build-Out Analysis.
- 3) LIST: Parcels Included in the Non-Residential Build-Out Analysis.

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BOARD**

I. NOTES ON THE DATABASE

The list of parcels (Attachment #3) included in the non-residential build-out analysis contains seventeen columns of data. An explanation of selected columns is given below.

Column 5 - OWNER: Owner's name is given for developed parcels only.

Column 6 - RTE 1: 'Yes' indicates that the parcel has frontage on Route 1. A blank in this column indicates the parcel does not have frontage on Route 1.

Column 7 - LOTSIZE: Lotsize is given in square feet and represents buildable area.

Column 9 - BUILD-OUT: This represents the maximum square feet of development which can be accommodated on a parcel given the particular dimensional and parking requirements for that zoning district.

Column 10 - RESIDUAL BUILD-OUT: Residual build-out represents the difference between build-out and any existing building on the parcel. It is the number of additional square feet that could be accommodated on that lot.

Column 11 - % BUILD-OUT: This represents the percentage of the lot which is currently built on.

Column 12 - EMPLOYEES: This is the number of employees which theoretically would be generated by development on a parcel at full build-out given the assumptions regarding the type of use. In most cases, the build-out analysis assumes retail development which gives a worst case scenario in terms of traffic generation. This number does not reflect the actual number of employees generated by the existing use on a parcel.

Column 13 - EMPLOYEES RESIDUAL BUILD-OUT: This column represents the number of new employees which would be generated by new development on a parcel under the build-out assumptions regarding use.

Column 14 - BUILD-OUT OFFICE (S-1): The S-1 district requires that no more than 25% of development on a parcel can be retail. The build-out program assumes that 25% will be retail and calculates build-out accordingly. This column indicates the square footage of office development. Column 16 indicates the square footage of retail development at full build-out.

Column 15 and 17 - RESIDUAL OFFICE, RESIDUAL RETAIL: These two columns indicate the additional development of office and retail uses for parcels in the S-1 District.

II. ASSUMPTIONS OF THE NON-RESIDENTIAL BUILD-OUT ANALYSIS

The results of the non-residential build-out analysis must be considered in the context of the assumptions governing the analysis. These assumptions were discussed in memos to the Growth Policy Committee dated April 28 and May 26. These assumptions should be reviewed. Some additional assumptions have been made as follows:

- 1) The assumption regarding the size of a parking space has been revised as per discussions with the Planning Board. The size of a parking space will be 350 square feet rather than 250.
- 2) The estimation of future employment in the build-out analysis is done by applying a conversion factor which indicates the number of square feet of development which generates one employee. The following conversion factors were used:

Retail: 1 employee per 588 square feet.
Office: 1 employee per 220 square feet.

These employment conversion factors were obtained from different sources and were approved by the Central Transportation Planning Staff for use in other build-out studies. The office employment conversion factor came from the BRA report, Planning for Boston's Next Decade of Development, Jason Kelly, Report #105 May 1980, revised 1983. The retail employment conversion factor came from the Quick Response Urban Travel Estimation Techniques and Transfereable Parameters, National Cooperative Highway Research Program Report #187.

III. PRELIMINARY RESULTS OF THE NON-RESIDENTIAL BUILD-OUT ANALYSIS

See attached chart.

PRELIMINARY RESULTS OF THE NON-RESIDENTIAL BUILD-OUT
6/23/88

Square Feet % of Build-Out New Employees Residual Build-Out

TOTAL BUILD-OUT

General Business	192,615	1.46	
Highway Business	704,335	5.33	
Neighborhood Business	75,737	0.58	
General Industrial	1,039,350	7.86	
Limited Industrial	3,356,406 <i>1,948,888</i>	25.39	
Special Use Total	7,848,535	59.38	
Office	5,886,403		
Retail	1,962,132		

Subtotal

13,216,978 100.00

13,216,978

RESIDUAL BUILD-OUT

General Business	29,388	0.24	50
Highway Business	564,248	4.70	957
Neighborhood Business	20,693	0.17	35
General Industrial	859,924	7.13	1,465
Limited Industrial	2,978,278	24.70	5,065
Special Use Total	7,601,665	63.06	29,146
Office	5,701,249		
Retail	1,900,416		

Subtotal

12,054,196 100.00 36,718

SQUARE FEET OF EXISTING
NON-RESIDENTIAL DEVELOPMENT

1,162,782

NON-RESIDENTIAL BUILD-OUT
PRELIMINARY RESULTS
6/23/00

MAP	PARCEL	ZONING	USE	OWNER	RTE	LOT	SITE	BUILD-OUT	RESIDUAL	EMPLOYEES	BUILD-OUT	RESIDUAL	BUILD-OUT	RESIDUAL	BUILD-OUT	RESIDUAL
1	1	1	1		1						(5-1)	(5-1)	(5-1)	(5-1)	(5-1)	(5-1)
1	1	1	1	ASSAQUO, H.	YES	72135.00	4400	36607	32707	12.02	140	123	27453	24155	9152	8057
1	1	5	1	PHARMACIANS, D.	YES	1713214.00	36607	64332	9545	85.59	254	37	49674	7159	16358	2306
2	7	6	1			43560.00	0	18669	18669	0.00	32	32	0	0	0	0
2	4970	6	1			43560.00	0	18669	18669	0.00	32	32	0	0	0	0
2	4954	6	1			43560.00	0	18669	18669	0.00	32	32	0	0	0	0
2	4600	6	1			10000.00	0	0	0	0.00	0	0	0	0	0	0
2	5345	6	1	LUGG, C.		95267.00	7200	40829	33479	17.63	69	57	0	0	0	0
2	4731	6	1	WEN ENGLAND TAP CO.	NO	63251.00	12100	27108	15008	44.44	44	26	0	0	0	0
4	10	5	1			60400.00	0	82714	82714	0.00	317	317	62036	62036	20678	20678
4	13	5	1			60100.00	0	72120	72120	0.00	277	277	54090	54090	18030	18030
4	22	5	1			60100.00	0	0	0	0.00	0	0	0	0	0	0
4	20	5	1			182780.00	0	3516	3516	0.00	13	13	2637	2637	879	879
4	11	5	1			87870.00	0	35714	35714	0.00	137	137	26786	26786	8928	8928
4	19	5	1	RODMAN, D.	YES	356192.00	32820	152654	119834	21.50	585	459	114490	89876	58144	29958
5	5	5	1			457393.00	0	46984	46984	0.00	257	257	50223	50223	16741	16741
5	25	5	1	CIVILINSKI, J.	YES	150717.00	9185	45956	36751	20.00	174	141	34452	27563	11484	9108
9	135	5	1			1159400.00	0	496886	496886	0.00	1905	1905	372664	372664	124222	124222
9	136	5	1			218200.00	0	93514	93514	0.00	359	359	70136	70136	23378	23378
10	2539	5	1			107490.00	0	44353	44353	0.00	170	170	33265	33265	11088	11088
10	1024	5	1	FOURDOR ASSOCIATION	NO	9272900.00	0	4018927	4018927	0.00	15402	15402	3012718	3012718	1004239	1004239
10	145	5	1	GALLOWAY, R.	YES	809480.00	5200	5200	0	100.00	20	0	3900	0	1300	0
10	145	5	1	RODMAN, D.	YES	104840.00	1515	53118	51603	2.85	204	198	39838	38702	13780	17901
15	4639	5	1			67160.00	0	27754	27754	0.00	104	104	20816	20816	6938	6938
15	372	5	1			1580548.00	0	595101	595101	0.00	2282	2282	446326	446326	148775	148775
15	374	5	1			3563559.00	0	276182	276182	0.00	1059	1059	207136	207136	49046	49046
16	130	5	1	KRITZMAN, C. (F.K. REALTY CORP)	YES	457770.00	4488	164637	160149	2.73	631	614	123478	120112	41159	40037
22	447	5	1	FOURDOR INDUSTRIAL PARK	NO	2265120.00	0	286946	286946	0.00	1100	1100	215210	215210	71756	71756
23	449	5	1	N.E. TELEPHONE ECHANGE	NO	172773.00	0	74046	74046	0.00	284	284	55534	55534	18512	18512
25	457	5	1			125017.00	0	53579	53579	0.00	205	205	40184	40184	13395	13395
30	492	5	1			22610.00	0	8100	8100	0.00	31	31	6075	6075	2023	2023
30	495	5	1			1110344.00	0	102946	102946	0.00	395	395	72710	72710	25756	25756
30	5362	5	1			185545.00	9146	79528	70382	11.50	305	278	57616	52786	19882	17596
30	491	5	1	EMDINE REALTY TRUST	YES	411642.00	26174	40020	13846	45.40	153	53	30015	10384	10005	3462
30	995	5	1	LAFAYETTE HOUSE	YES	84210.00	9612	36757	27145	26.15	141	104	27568	20359	9189	6786
30	450	5	1	SAEEN, N.	YES	181209.00	2400	77661	75261	3.09	298	289	58246	56446	19415	18015
30	490	5	1	SAEEN, N.	YES	123274.00	7778	52832	45104	14.63	203	173	39624	33828	13708	11276
30	5559	5	1	YADISCRANIA, E.	YES	179902.00	39500	77101	37801	50.97	296	145	57826	28351	19275	9450
31	452	5	1			91534.00	0	39905	39905	0.00	1533	1533	29929	29929	99976	99976
31	5549	5	1			652764.00	0	77500	77500	0.00	297	297	58125	58125	19375	19375
31	475	5	1	DEVINCENT, S.	YES	80400.00	3833	37300	33467	10.72	144	129	28125	25250	9375	8417
31	698	5	1	MELPIS, A.	YES	199400.00	7178	39786	31958	18.45	151	123	29464	23968	9822	7490
31	5548	5	1	SANDBERG, H.	NO	204296.00	22790	57344	31554	31.74	220	132	43008	25916	14336	8630
40	987	MB				36400.00	0	10962	10962	0.00	19	19	0	0	0	0

06/15/88

NON-RESIDENTIAL BUILD-OUT
PRELIMINARY RESULTS
6/23/88

MAP PARCEL ZONING USE	OWNER	ATE	LOTSIZE	BUILDING SIZE	RESIDENTIAL BUILD-OUT		EMPLOYEES		BUILD-OUT		RESIDENTIAL	
					BUILD-OUT	OUT	RESIDENTIAL	OFFICE	OFFICE	RETAIL	RETAIL	
40 976 NB VACANT CORN		YES	34940.00	0	11088	11088	0.00	19	0	0	0	0
40 986 NB VACANT CORN		YES	81680.00	0	70618	70618	0.00	120	0	0	0	0
40 977 NB LINDER YARD	CHANCE, B.	YES	300281.00	18310	47917	29377	38.27	81	50	0	0	0
40 978 S-1 HOTEL	WATT	YES	44344.00	4244	11325	7061	37.63	43	27	8494	5296	1763
51 1378 NB VACANT CORN		YES	87560.00	0	18336	18336	0.00	31	31	0	0	0
51 1374 NB VACANT CORN		YES	67510.00	0	19783	19783	0.00	34	34	0	0	0
51 4877 NB VACANT CORN		YES	26272.00	0	7882	7882	0.00	13	13	0	0	0
51 4541 NB VACANT CORN		YES	40600.00	0	12000	12000	0.00	20	20	0	0	0
51 1373 NB STORAGE	ANTONAL, A.	YES	219050.00	79030	79030	0	100.00	134	0	0	0	0
51 1376 NB AUTO SUPPLIES	LUZIO, G.	YES	96537.00	13494	23333	9439	39.35	40	16	0	0	0
51 979 NB OFFICE	SPIER, A	YES	23907.00	4300	66908	62408	6.43	114	106	0	0	0
51 4676 NB GREENHOUSE	WHITE, R.	YES	19707.00	500	5332	9.81	0	9	9	0	0	0
53 1486 NB OFFICE	MASS. CABLEVISION		47788.00	4808	4808	0	100.00	12	0	0	0	0
54 1488 NB GAS STATION	STS. INC.		19740.00	1962	3918	1986	49.70	7	3	0	0	0
54 1442 NB DISCOUNT STORE	BALEY, B.		223898.00	34920	34920	0	100.00	59	0	0	0	0
54 1438 NB GAS STATION	SHOH, S		15884.00	0	1155	1155	0.00	2	2	0	0	0
54 1482 NB STORAGE	SHOH, S		167780.00	10900	20972	16072	31.97	36	17	0	0	0
54 1476 NB REST.	PAPPAS, P		28043.00	1470	5409	4139	26.21	10	7	0	0	0
54 1485 NB SMALL RETAIL	POWER, I.		13875.00	880	2715	1835	32.41	5	3	0	0	0
55 4935 NB VACANT IND	VSH REALTY INC.		26971.00	4500	5438	1138	78.82	10	2	0	0	0
55 1514 61 VACANT IND			20000.00	0	4950	4950	0.00	8	8	0	0	0
55 1528 61 VACANT IND			137070.00	0	55409	55409	0.00	95	95	0	0	0
55 1529 61 VACANT IND			27490.00	0	8307	8307	0.00	14	14	0	0	0
55 1530 61 VACANT IND			202581.00	0	86820	86820	0.00	148	148	0	0	0
55 1531 61 VACANT IND			55310.00	0	23790	23790	0.00	40	40	0	0	0
55 1532 61 VACANT IND			436081.00	0	184892	184892	0.00	318	318	0	0	0
55 1543 61 VACANT IND			15450.00	0	0	0	0.00	0	0	0	0	0
55 1548 61 VACANT IND			21133.00	0	11071	11071	0.00	19	19	0	0	0
55 1549 61 VACANT IND			10124.00	0	5660	5660	0.00	10	10	0	0	0
66 1866 NB CAR WASH	ENERGY RETAILER		17805.00	1606	2226	620	72.15	4	1	0	0	0
66 1809 NB GARAGE	FERGUSON, H.		72823.00	748	1600	912	45.71	3	2	0	0	0
67 1928 NB VACANT IND			53940.00	0	6743	6743	0.00	11	11	0	0	0
67 1947 61 VACANT IND			74540.00	0	0	0	0.00	0	0	0	0	0
67 1967 61 VACANT IND			85012.00	0	22857	22857	0.00	39	39	0	0	0
67 1971 61 VACANT IND			11990.00	0	5139	5139	0.00	9	9	0	0	0
67 1979 L1 VACANT IND			24375.00	0	10446	10446	0.00	18	18	0	0	0
67 1970 61 ELECTRICAL			10500.00	216	4156	4134	4.97	7	7	0	0	0
68 1995 61 VACANT IND			11026.00	0	504	504	0.00	1	1	0	0	0
68 1997 61 VACANT IND			23019.00	0	11750	11750	0.00	20	20	0	0	0
68 1998 61 VACANT IND			15811.00	0	7134	7134	0.00	12	12	0	0	0
79 2244 NB VACANT CORN			23510.00	0	1855	1855	0.00	3	3	0	0	0
79 2261 NB VACANT CORN			2814.00	0	2814	2814	0.00	5	5	0	0	0
79 2329 61 VACANT CORN			31375.00	0	10571	10571	0.00	18	18	0	0	0
79 2344 NB VACANT CORN			14051.00	0	2100	2100	0.00	4	4	0	0	0
79 2233 NB VACANT CORN			10000.00	0	1750	1750	0.00	2	2	0	0	0
79 2271 NB VACANT CORN			340.00	0	45	45	0.00	0	0	0	0	0

NON-RESIDENTIAL BUILD-OUT
PRELIMINARY RESULTS
6/23/80

MAP PARCEL ZONING USE	OWNER	RTE	LOT/STREET	BUILDING	BUILD-OUT	OUT	EMPLOYEES	BUILD-OUT	OFFICE	BUILD-OUT	RETAIL	RETAIL
				SITE	RESIDUAL	RESIDUAL	RESIDUAL	RESIDUAL	OFFICE	RESIDUAL	OFFICE	RETAIL
					(5-1)	(5-1)	(5-1)	(5-1)	(5-1)	(5-1)	(5-1)	(5-1)
79 1940 61 VACANT 1ND			108444.00	0	46485	46485	0.00	0	0	0	0	0
79 4502 61 VACANT 1ND			23247.00	0	12250	12250	0.00	0	0	0	0	0
79 2240 60 BUILDINGS	AUBURN, N		23110.00	7140	7140	0	100.00	12	0	0	0	0
79 2332 61 SMALL RETAIL	DAY COLONY ASSC.		43930.00	2340	3000	440	78.47	3	1	0	0	0
79 2734 60 BANK	BUCKLEY, B.		2200.00	2300	2500	0	100.00	4	0	0	0	0
79 2245 60 SMALL RETAIL	BEAVER		22531.00	3740	3740	0	100.00	6	0	0	0	0
79 2353 60 SMALL RETAIL	CAMMER, R.		9340.00	4300	4300	0	100.00	8	0	0	0	0
79 2340 60 AUTOMOTIVE	CONSON, N		10993.00	400	1120	720	35.71	2	1	0	0	0
79 4769 60 MOTION VEHICLE	CONSON, B.		4140.00	4391	4391	0	100.00	8	0	0	0	0
79 2341 60 SALES	STODI		4540.00	2294	2294	0	100.00	4	0	0	0	0
79 2349 60 OFFICE	BURKLESS, J.	YES	12296.00	4450	4450	0	100.00	11	0	0	0	0
79 2762 60 SMALL RETAIL	FOTOFORD NATIONAL		14230.00	5428	5428	0	100.00	9	0	0	0	0
79 2219 60 BANK												
79 2219 60 MOTION PICTURES	FOTOFORD THEATRE INC.		4354.00	5824	5824	0	100.00	10	0	0	0	0
79 2343 60 OFFICE	GALVIN, B.		16540.00	4072	4072	0	100.00	10	0	0	0	0
79 4610 60 SMALL RETAIL	GAY, K.		3918.00	2460	2460	0	100.00	4	0	0	0	0
79 2351 60 SMALL RETAIL	GEARY, J.		9441.00	9672	9672	0	100.00	16	0	0	0	0
79 2340 11 STORAGE	HAGS, J.		119354.00	18166	20036	1870	90.17	34	3	0	0	0
79 2263 60 REST.	JEROME, J.		23340.00	8100	8100	0	100.00	14	0	0	0	0
79 2722 60 FURNISH. MORE	KEATING, H		9115.00	3151	3151	0	100.00	5	0	0	0	0
79 2352 60 SMALL RETAIL	MACDONALD, B		5750.00	2244	2244	0	100.00	4	0	0	0	0
79 4605 60 SMALL RETAIL	MASS. EAST. CONST. CO.		5749.00	2847	2847	0	100.00	5	0	0	0	0
79 4781 60 SMALL RETAIL	MAYFAIR REALTY		2732.00	900	900	0	100.00	2	0	0	0	0
79 4604 60 SMALL RETAIL	ROOKE, P		3257.00	1950	1950	0	100.00	3	0	0	0	0
79 2244 60 OFFICE	RODINI, J.		12190.00	3526	3526	0	100.00	6	0	0	0	0
79 2220 60 GAS STATION	ROUSE, C.		29446.00	2112	2112	0	100.00	4	0	0	0	0
79 2231 60 BANK	MORFOLK COUNTY TRUST		0.00	2560	2560	0	100.00	4	0	0	0	0
79 2323 11 OFFICE	CRUSHAL		47919.00	8000	18511	10511	43.22	31	18	0	0	0
79 2325 11 REST.	CRUSHAL		7100.00	1040	1040	0	100.00	2	0	0	0	0
79 2322 11 OFFICE	OLIVIERA, B.		30603.00	7040	11445	4663	40.47	20	8	0	0	0
79 2350 60 SMALL RETAIL	O'REILLY, J.		3390.00	2664	2664	0	100.00	5	0	0	0	0
79 2257 60 OFFICE	PACITTO, C.		10890.00	4392	4392	0	100.00	7	0	0	0	0
79 2355 60 OFFICE	DEA CRAFT PRESS		12190.00	8000	8000	0	100.00	15	0	0	0	0
79 2354 60 SMALL RETAIL	SOUTA, J.		2499.00	900	900	0	100.00	2	0	0	0	0
79 2265 60 OFFICE	STANLEY, G.		20270.00	2854	2854	0	100.00	5	0	0	0	0
79 2259 60 SMALL RETAIL	TOURBON 15, V.		10600.00	4162	4162	0	100.00	7	0	0	0	0
79 2345 60 TELEPHONE	NEW ENGLAND TELEPHONE		18293.00	5948	5948	0	100.00	10	0	0	0	0
84 2070 80 SMALL RETAIL	CONKEY, B.		67533.00	2854	13507	10655	21.13	23	18	0	0	0
92 4894 11 VACANT COM			5400.00	0	0	0	0.00	0	0	0	0	0
92 2710 11 VACANT TRDS.			24198.00	0	37179	37179	0.00	43	43	0	0	0
92 2653 60 OFFICE BLD	BAUER, J		15420.00	2145	2145	0	100.00	4	0	0	0	0
92 2705 60 BANK	POST. FIVE CENT SAVINGS BANK		27275.00	4200	4200	0	100.00	7	0	0	0	0

NON-RESIDENTIAL BUILD-OUT
PRELIMINARY RESULTS
8/23/88

MAP	PARCEL	ZONING USE	OWNER	RATE	SITE	BUILD-OUT		EMPLOYEES		BUILD-OUT		RESIDUAL	
						RESIDUAL	OFFICE	RESIDUAL	OFFICE	RESIDUAL	OFFICE	RESIDUAL	OFFICE
92	2728 LI	OFFICE BLD.	CARNEY, H	1	6000	4500	48.00	21	11	0	0	0	0
92	2713 LI	STORAGE	CONCRETE, B		3390	3390	0 100.00	4	0	0	0	0	0
92	2630 60	BANK	FOURBOND		2459	2459	0 100.00	4	0	0	0	0	0
				COOP. FED. SAVINGS & LOAN									
92	2631 60	BANK	FOURBOND FED. SAVINGS AND LOAN		5757.00	1102	1102 0.00	2	2	0	0	0	0
92	2703 60	BEST	LYREN, D		13100.00	4204	0 100.00	7	0	0	0	0	0
92	2634 60	INDUSTRIAL HOME	RAMBERT, B.		24800.00	16174	0 100.00	28	0	0	0	0	0
92	2704 60	BANK	FOI. SAVINGS BANK		5750.00	2702	0 100.00	5	0	0	0	0	0
92	2700 LI	MANUFACTURING	FOURBOND COMPANY		127829.00	22600	32227 41.72	93	55	0	0	0	0
94	2845 LI	VACANT COMM			216320.00	0	92709 0.00	150	150	0	0	0	0
94	2844 LI	VACANT COMM			72745.00	0	0 0.00	0	0	0	0	0	0
94	2846 LI	VACANT COMM			526460.00	0	22233 0.00	384	384	0	0	0	0
94	2842 LI	AUTO REPAIR	LOUISO, C		194544.00	6000	0 100.00	10	0	0	0	0	0
94	2843 LI	AUTO REPAIR	ROUNDS, A		297233.00	3600	26714 13.48	45	39	0	0	0	0
97	2789 MB	EQUIPMENT	BARROS ELECTRIC		60740.00	1650	942 63.64	4	2	0	0	0	0
106	3118 LI	MANUFACTURING	FOURBOND COMPANY		440797.00	36935	6165 86.30	77	10	0	0	0	0
106	3119 LI	MANUFACTURING	FOURBOND COMPANY		1065797.00	164487	47198 25.90	1681	801	0	0	0	0
100	3165 LI	VACANT COMM			49650.00	0	21282 0.00	34	34	0	0	0	0
100	3165 LI	VACANT COMM			1193350.00	0	49786 49786 0.00	85	85	0	0	0	0
100	3166 LI	VACANT IND.			495413.00	0	7725 0.00	131	131	0	0	0	0
100	3168 LI	VACANT IND.			152660.00	0	49397 49397 0.00	840	840	0	0	0	0
100	3164 LI	MANUFACTURING	ALDEN - FOI. REALTY TRUST		213668.00	24000	67289 26.29	155	114	0	0	0	0
121	3456 MB	VACANT			7846.00	0	0 0.00	0	0	0	0	0	0
121	4046 LI	VACANT COMM			7100.00	0	0 0.00	0	0	0	0	0	0
121	4949 MB	BANK	FOURBOND NATIONAL BANK		14024.00	1089	4200 3111 25.93	7	5	0	0	0	0
121	3447 MB	BUS STATION	SHELL OIL CO.		29591.00	3454	11750 8076 31.10	20	14	0	0	0	0
122	3480 LI	VACANT COMM			130176.00	0	32429 32429 0.00	55	55	0	0	0	0
122	3475 LI	VACANT COMM			283500.00	0	121500 0.00	207	207	0	0	0	0
122	3478 LI	VACANT IND			509540.00	0	218374 0.00	371	371	0	0	0	0
122	3474 LI	VACANT IND			1583540.00	0	100179 100179 0.00	170	170	0	0	0	0
123	4972 LI	STORAGE	KEYDATA CORP.		435400.00	23800	89879 64029 26.49	153	112	0	0	0	0
134	3614 LI	VACANT COMM			17500.00	0	0 0.00	0	0	0	0	0	0
134	3445 LI	VACANT COMM			95396.00	0	4084 4084 0.00	70	70	0	0	0	0
134	3613 LI	VACANT COMM	1 million sq. ft. CAROL, CAROL & FORBES		3740932.00	0	103536 706644 0.00	179	179	0	0	0	0
135	3481 LI	VACANT COMM			7250.00	0	0 0.00	0	0	0	0	0	0
135	3477 LI	VACANT COMM			183390.00	0	78596 78596 0.00	134	134	0	0	0	0
137	3702 61	STORAGE	AMAT, J.		148104.00	0	18395 18395 3.00	31	31	0	0	0	0
137	5223 61	STORAGE	SCHMIDL, W.		73614.00	85750	0 100.00	148	0	0	0	0	0
138	5480 61	MISC. PUBLIC SERVICE	SELWICK, R.		87120.00	1100	37337 26.37 4.55	63	61	0	0	0	0

Strike

} strike

Should be 461,420 (a hundred & under cents. 1 million)

NON-RESIDENTIAL BUILD-OUT
PRELIMINARY RESULTS
6/23/08

MAP PARCEL ZONING USE	OWNER	RTE	LOTSIZE	BUILDING SIZE	BUILD-OUT	RESIDUAL BUILD-OUT	EMPLOYEES	BUILD-OUT OFFICE	RESIDUAL OFFICE	BUILD-OUT RETAIL	RESIDUAL RETAIL		
								(5-1)	(5-1)	(5-1)	(5-1)		
146 3631 LI	VACANT TRGS.		1101955.00	0	28143	28143	0.00	0	0	0	0		
147 4967 LI	GREENHOUSE		102545.00	668	30964	50276	2.16	0	0	0	0		
149 3912 61	VACANT CORR		92398.00	0	21000	21000	0.00	0	0	0	0		
149 5114 61	STORAGE		106544.00	70100	70100	0	100.00	0	0	0	0		
156 4019 HD	VACANT CORR		110128.00	0	8925	8925	0.00	0	0	0	0		
156 4957 LI	VACANT CORR		44070.00	0	0	0	0.00	0	0	0	0		
156 4916 HD	VACANT CORR		60984.00	0	19492	19492	0.00	0	0	0	0		
156 4733 HD	VACANT CORR		702773.00	0	25482	23482	0.00	0	0	0	0		
157 4027 LI	GAS STATION		20000.00	300	300	0	100.00	0	0	0	0		
157 4049 HD	SHOPPING CENTER		190109.00	19200	21760	2500	88.48	0	0	0	0		
165 4733 HD	VACANT CORR		1301674.00	0	0	0	0.00	0	0	0	0		
166 4020 HD	VACANT CORR		34056.00	0	9017	9017	0.00	0	0	0	0		
166 4213 HD	VACANT CORR		80150.00	0	7960	7960	0.00	0	0	0	0		
166 5542 HD	VACANT CORR		53143.00	0	12850	12850	0.00	0	0	0	0		
171 4304 LI	STORAGE		326244.00	50000	139827	89827	35.76	0	0	0	0		
172 4314 LI	VACANT CORR.		149122.00	0	63809	63809	0.00	0	0	0	0		
172 4310 LI	VACANT CORR		17910.00	0	47597	47597	0.00	0	0	0	0		
172 5339 LI	VACANT CORR		81310.00	0	23464	23464	0.00	0	0	0	0		
172 4315 LI	VACANT CORR		480238.00	0	182245	182245	0.00	0	0	0	0		
172 5543 LI	VACANT CORR		20620.00	0	0	0	0.00	0	0	0	0		
see Total see													
0000 499712			5541440.00	1162782	1324878	12054196	8211.15	39225	36718	5884403	3701251	1962132	1900414

104,000 sq ft
to present change



Metropolitan Area Planning Council

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FOXBOROUGH BUILD-OUT ANALYSIS INFORMATION MEMORANDUM

Presented to the Foxborough Growth Policy Committee
April 28, 1988

FOXBOROUGH BUILD-OUT

I. PURPOSE OF THE BUILD-OUT

Much of growth management planning is based on determining a town's capacity to handle future growth in terms of its impact on infrastructure and fiscal resources. Analyzing the capacity to handle growth requires some measure of future growth. This is achieved by performing a build-out analysis which projects the maximum potential development on a community's land under the constraints of existing local land use controls and environmental factors. The build-out analysis consists of two components: residential build-out and non-residential buildout.

The residential build-out looks at all vacant, developable land which is residentially zoned and determines the number of housing units which could be built on the remaining land under existing zoning. The number of units is used to determine the future population and requirements for additional capacity in the school system and for other municipal services.

The non-residential build-out looks at the potential for development on vacant land zoned for industrial, commercial or office development. It will also consider the potential for expansion and redevelopment on selected developed parcels which are not currently developed to their maximum density.

II. ASSUMPTIONS

In order to arrive at an estimate of future development, certain assumptions must be made concerning growth patterns and the application of the zoning bylaw.

ASSUMPTIONS APPLICABLE TO BOTH BUILD-OUT ANALYSES

- 1) The build-out analysis assumes no parcels are re-zoned and that no changes are made to the zoning bylaws.
- 2) The build-out analysis does not take into account the possibility of granting variances.
- 3) The build-out analysis assumes that there are no changes in lot sizes. The possibility of combining lots to create a larger lot able to meet the minimum requirements or to take advantage of development options is not considered.

4) For parcels identified by the Planning Administrator as containing significant wetlands, the lotsize was reduced to reflect the buildable acreage.

5) All parcels within the Water Resources District were identified and subjected to the more stringent requirements for lotsize and setbacks.

ASSUMPTIONS APPLICABLE TO THE RESIDENTIAL BUILD-OUT

1) The residential build-out analysis does not consider lot geometry in determining the number of units which can be built on any given lot and does not consider setbacks and frontage requirements.

2) Although residential development is allowed in the GB and NB districts, the build-out assumes that all future residential development will occur in residential districts only.

3) Due to economic factors, it is assumed that all future residential development in the R-15 zone will be two-family or multi-family, according to the lotsize.

4) On parcels for which there is an approved or pending subdivision likely to be approved (as determined by the Planning Administrator), the actual number of units will be used rather than the number that would be derived using the build-out methodology.

5) On lots of a certain size (to be determined) ,the lotsize will be reduced by 15% to account for the area required for new roads.

6) The build-out analysis assumes that all residentially zoned parcels will be developed as residential and that no Planned Developments with mixed uses will occur.

ASSUMPTIONS APPLICABLE TO NON-RESIDENTIAL BUILD-OUT

1) Setback and frontage requirements are considered in determining the build-out potential. The lot frontage and depth are factored in but all lots are assumed to have a regular shape.

2) In districts where both office ^{EB NB} and retail development are permitted uses, the build-out analysis assumes that retail development will occur.

3) The zoning bylaw (Table 2-7) contains differing parking requirements based on the size of retail development. Because most of the undeveloped retail parcels are small, the requirement of one parking space per 175 square feet of retail development required for retail development under 15,000 square feet, will be used in the non-residential build-out.

4) The provision for increased front yards when a non-residential lot abuts a residential lot (Schedule A of the Zoning Bylaw) will be ignored due to the small number of lots which would meet this criterion.

5) As per discussions with the Planning Board Engineer, the figure of 250 square feet per parking space will be used when calculating the area required for parking.

300 sq. ft.

S-1
only 250 sq
retail

APPENDIX B

WATER RESOURCE PROTECTION DISTRICT BY-LAW
PREPARED BY SEA CONSULTANTS, MARCH 1989

December 6, 1988
revised: January 10, 1989
revised: January 25, 1989
revised: March 20, 1989
revised: March 24, 1989

DRAFT #5
Town of Foxborough
Water Resource Protection District

SECTION I

Findings

The Town of Foxborough finds that:

- (a) the groundwater underlying this Town is a significant source of its existing and future drinking water supply.
- (b) the groundwater aquifers are integrally connected with, and flow into, the surface waters, lakes, and streams which constitute significant recreational and economic resources of the Town.
- (c) spills and discharges of petroleum products and other toxic and hazardous materials and the discharge of sewage have repeatedly threatened the quality of such ground water supplies and related water resources throughout Massachusetts and elsewhere, posing potential public health and safety hazards and threatening economic losses to the affected communities.

SECTION II

Purpose of District

The purpose of the Water Resource Protection District is to protect the public health, safety, and general welfare of the community by:

- (a) preserving and maintaining the existing and potential groundwater supplies, aquifers, and groundwater recharge areas of the Town, and protecting them from adverse development or land-use practices;
- (b) preserving and protecting present and potential sources of drinking water supply for the public health and safety;
- (c) conserving the natural resources of the Town; and
- (d) preventing blight upon and/or pollution of the environment.

SECTION III

Scope of Authority

The Water Resource Protection District shall be considered as overlaying other zoning districts. Any use not permitted in the other zoning districts shall not be permitted in the Water Resource Protection District. Any uses permitted in the portions of the districts so overlaid shall be permitted, except that where the Water Resource Protection District imposes greater or additional restrictions and requirements, such restrictions and requirements shall prevail.

This bylaw is adopted under Massachusetts General Laws, Chapter 40A, as amended.

SECTION IV

Establishment and Delineation of Water Resource Protection District

For the purposes of this bylaw, there is hereby established within the Town of Foxborough a Water Resource Protection District, consisting of aquifer recharge areas for existing, proven, and future well sites (Zone II and Zone III), future potential aquifer areas, and bodies of water, which are described herein and which may or may not be delineated on a map at a scale of 1 inch to 1,000 feet, dated February 1989, entitled Water Resource Protection District, Town of Foxborough.

This map shall be considered as superimposed over other districts established by the zoning bylaws of the Town. This map, as it may be amended from time to time, is on file with the office of the Town Clerk and with the Building Commissioner, and with any explanatory material thereon, is hereby made a part of this zoning bylaw.

Where the bounds of the Water Resource Protection District, as delineated on the Water Resource Protection District map, are in doubt or in dispute, the burden of proof shall be upon the owner(s) or special permit applicant(s) of the land in question to show where they should properly be located. At the request of the owner(s) whose land has been designated as part of the Water Resource Protection District, the Town, acting by its Zoning Board of Appeals (as per Section III.D.), may engage a professional hydrogeologist or geologist to determine more accurately the location and extent of an aquifer or recharge area and may charge the owner(s) for all or part of the cost of the investigation.

As delineated on the map, the Water Resource Protection District includes:

- A. Zone II: That area of an aquifer which contributes water to a well under the most severe recharge and pumping conditions that can be realistically anticipated (180 days pumping at safe yield with no recharge from precipitation).

It is bounded by the groundwater divides which result from pumping the well and by the contact of the edge of the aquifer with less permeable materials such as till and bedrock. At some locations, surface water features may represent recharge boundaries.

B. Zone III: That land area beyond the area of Zone II from which surface water and groundwater drain into Zone II. The surface water drainage divides as determined by topography will be used to delineate Zone III. In some locations, where surface and ground water are not coincident, Zone III shall consist of both the surface drainage and the ground water drainage areas.

C. Future Potential Aquifers: The land area outside the limits of Zone II and Zone III which contains stratified drift aquifer deposits with a saturated thickness greater than 10 feet. These areas may, upon further test well exploration, prove suitable for the development of municipal water supply wells. Therefore, the regulations set forth in this bylaw pertaining to Zone II areas also apply to Future Potential Aquifer Areas.

In addition to the Zone II, Zone III and Future Potential Aquifer areas delineated on the Water Resource Protection District map, the following areas are not shown on the map but are included, by definition, in the Water Resource Protection District:

D. Body of Water: The shoreline of any body of water whether natural or man-made including, without limitation, any stream, river, lake or pond, each to the seasonal high water line, and a surrounding protective setback, extending two hundred fifty (250) feet from the edge of the body of water. Said body of water shall be in existence before this amendment unless said body of water is created for the sole intent and purpose for use as a source of potable water.

SECTION V

Use Regulations Applying to the Water Resource Protection District

A. Prohibited Uses in Zone III:

Within Zone III the following uses are specifically prohibited:

- (a) Disposal of liquid or leachable wastes other than normal sanitary waste;
- (b) Sanitary landfills, disposal of solid wastes other than brush and stumps, and disposal of brush and stumps by burial with less than four feet of clearance above the observed maximum water table;
- (c) Junkyards or motor vehicle salvage operations;
- (d) Any package sewage treatment plants with on-site disposal of treated effluent which exceeds the water quality based effluent limitations set forth in the Massachusetts Ground Water Discharge Permit Program (314 CMR 5.00) and specifically 314 CMR 5.10(3)(a), (b) and (c) ;
- (e) Outside storage of road salt or other de-icing chemicals;
- (f) Disposal of snow that contains de-icing chemicals and that has been brought in from outside the Water Resource Protection District;
- (g) Commercial establishments or municipal facilities for the washing, servicing, or repair of motor vehicles, airplanes, or boats;
- (h) Commercial establishments for the plating, finishing, etching, or polishing of metals or semiconductors;
- (i) Manufacture of semiconductors or other electronic components;
- (j) Chemical or bacteriological laboratories;
- (k) Underground storage tanks for petroleum products or any toxic or hazardous substance, except for replacement or upgrading of existing storage without increasing capacity provided there is compliance with all local, state and federal laws.
- (l) Storage and/or sale of petroleum or refined petroleum products, except within building which it will heat;
- (m) The storage of manure, not for the primary purpose of agriculture;
- (n) Animal feedlots;

- (o) The use of septic system cleaners which contain toxic chemicals.

B. Prohibited Uses in Zone II, Future Potential Aquifers and Body of Water 250 Foot Setback areas:

Within Zone II, Future Potential Aquifers, and Body of Water 250 foot setback areas, the following uses are specifically prohibited:

- (a) all uses prohibited in Zone III (see Section V.A (a) - (o) above);
- (b) Dry cleaning establishments and/or coin or commercial laundries where cleaning is performed on the premises;
- (c) Painting, wood-preserving, or stripping paint on a commercial scale;
- (d) Commercial establishments for printing, photocopying, or photographic processing;
- (e) Electronic circuit assembly on a commercial scale;
- (f) Storage of herbicides, pesticides, or fertilizers in amounts greater than 50 gallons or 250 pounds dry weight;
- (g) Any other use which involves as a principal activity the manufacture, storage, use, or disposal of toxic or hazardous material, except as allowed by special permit below.

C. Special Permit Uses in Zone II, Future Potential Aquifers and Body of Water 250 Foot Setback areas:

Within Zone II, Future Potential Aquifers, and Body of Water 250 foot setback areas, the following uses are allowed only by Special Permit:

- (a) Golf courses, whether public or private;
- (b) Earth removal and mining of land for on-site and/or off-site use;
- (c) Any new single/two-family residential structure involving the retention of less than forty (40%) percent of the entire lot in an open and/or vegetated state and greater than twenty (20%) percent impervious surface area over the entire lot;

- (d) Any non-residential use or multi-family structure or expansion of a non-residential use or multi-family structure involving the retention of less than thirty (30%) percent of the entire lot in an open and/or vegetated state and greater than forty (40%) percent impervious surface area over the entire lot;
- (e) Any use where design sewage flow exceeds 165 gallons per day per 10,000 square feet of upland lot area, or 10,000 gallons per day total design sewage flow, as calculated from the Board of Health regulations;
- (f) Any use which involves as an accessory activity the storage, use, or disposal of toxic or hazardous materials, not including ordinary household use;
- (g) A non-conforming, non-residential or multi-family structure or use shall not be altered, reconstructed, extended or structurally changed without a special permit from the SPGA, provided that said board finds that such alteration is not substantially more detrimental to the water resources than the existing non-conforming structure or use within the defined water resource protection districts. No special permit shall be granted for any alteration, reconstruction, extension or structural change for a non-conforming structure or use without a specific finding by the SPGA that the proposed alteration, reconstruction, extension or structural change will not violate any of the provisions of this bylaw. It shall be the responsibility of the applicant proposing said alteration, reconstruction, extension or structural change to demonstrate to the SPGA that the proposed alteration, reconstruction, extension or structural change will not violate any of the provisions of this bylaw.

D. Special Permit Uses in Zone III:

AMENDED ON TOWN MEETING FLOOR TO MOVE TO SECTION V-A.

E. Permitted Uses:

Within Zone II, Zone III, Future Potential Aquifers, and Body of Water 250 foot setback areas, the following uses are specifically permitted, provided all other necessary permits, orders, or approvals required by local, state, or federal law have been obtained:

- (a) All ordinary and customary uses associated with expansion, maintenance and upkeep of existing single/two-family residential structures;
- (b) All ordinary and customary uses associated with the maintenance and upkeep of buildings and grounds of existing non-residential land uses and multi-family residential structures, without any increase in floor area, provided that the density regulations in Section VI are not exceeded;
- (c) New commercial development limited to retail shopping, business or professional office, or industrial development limited to storage of non-toxic, non-hazardous materials, provided that the density regulations in Section VI are not exceeded;
- (d) New residential development, provided that the density regulations in Section VI are not exceeded;
- (e) Conservation of soil, water, plants and wildlife;
- (f) Non-intensive agricultural uses: pasture, light grazing, hay, gardening, nursery, conservation, forestry, and harvesting provided that fertilizers, herbicides, pesticides, and other leachable materials are not stored outdoors or in any other manner which would permit leakage thereof;
- (g) Outdoor recreation, nature study, boating, fishing, and hunting where otherwise legally permitted; foot, bicycle and/or horse paths and bridges;
- (h) Normal operation and maintenance of existing water bodies and dams, splash boards, and other water control, supply, and conservation devices;

SECTION VI

Density Regulations Applying To The Water Resource Protection District:

- A. Within Zone II, Zone III, Future Aquifer Areas, and Body of Water 250 foot setback areas, any new single/two family residential lot shall not exceed twenty percent (20%) impervious surface area, or retain less than forty percent (40%) in an open and/or vegetated state, over the entire lot, without a Special Permit. Any non-residential lot or multi-family lot within these zones shall not exceed forty percent (40%) impervious surface area, or retain less than thirty percent (30%) in an open and/or vegetated state, over the entire lot, without a Special Permit.
- B. Within Zone II, Future Aquifer Areas, and Body of Water 250 foot setback areas, the design sewage flow for new development, as calculated from the Board of Health regulations, shall not exceed 165 gallons per day per 10,000 square feet of upland lot area. No additional development on an already developed non-residential or multi-family residential site shall exceed this standard without a special permit.
- C. Within Zone III, the design sewage flow for new development, as calculated from the Board of Health regulations, shall not exceed 165 gallons per day per 10,000 square feet of total lot area. No additional development on an already developed non-residential or multi-family residential site shall exceed this standard without a special permit.
- D. Within Zone II, Future Aquifer Areas, and Body of Water 250 foot setback areas, any single/two-family residential lot shall contain a minimum of 60,000 square feet of which a minimum of 30,000 square feet shall be upland area.
- E. Within Zone III any single/two-family residential lot shall contain a minimum of 40,000 square feet.
- F. No division of a parcel of land shall create a parcel which violates the minimum lot size and upland area requirements of Section VI.D. and E. above, unless all proposed development and sewage disposal is located on the portion of the subdivided lot which lies outside of any Water Resource Protection District.

SECTION VII

Special Permit Requirements Within the Water Resource Protection District:

- A. **Special Permit Granting Authority (SPGA):** The Planning Board as SPGA will have the authority to grant Special Permits as herein defined and subject to the provisions of these bylaws. A special permit shall be granted if the SPGA determines, in conjunction with other town agencies as specified in Section VII.C. that the intent of this section as well as its specific criteria are met. In making such determination, the SPGA shall give consideration to the simplicity, reliability and feasibility of the control measures proposed and the degree of threat to water quality which would result if the control measures failed. In particular, for all new development, and expansion of existing non-residential and multi-family residential development within the District, groundwater quality shall not be allowed to violate State and Federal drinking water standards at the downgradient property boundary.

The special permit shall include an explanation by the SPGA of any departures from the recommendations of the other Town agencies.

- B. **Materials to be Submitted by Applicants:** The following materials shall be submitted to the SPGA (six copies) and the Town Clerk (one copy) at the expense of the applicant.
1. A site plan showing existing and proposed structures and the location of all facilities relevant to the other requirements specified in Paragraphs 2, 3, and 4 below.
 2. A complete list of all chemicals, pesticides, fuels, and other potentially toxic or hazardous materials to be used, generated, stored, or disposed of on the premises.
 3. A description of proposed measures to protect all storage containers or facilities associated with such materials from vandalism, accidental damage, corrosion, and leakage. Such measures might include secure storage areas, shelters for corrodible or water-soluble materials, spill control provisions around transfer points, and a schedule of future monitoring of waste streams or groundwater on the site to ensure that proper control has been maintained.
 4. A description of proposed methods by which runoff from impervious areas will be recharged into the ground within the premises, preferably by diversion into vegetated areas where surface infiltration will occur. Discharge of all runoff shall be preceded by flow through oil and grease traps. Dry wells shall be used only where surface infiltration is not feasible. Dry wells shall be equipped with oil and grease traps, and sediment traps constructed, operated and maintained in a manner acceptable to the SPGA.

5. An erosion and sedimentation control plan.
6. Projections of concentrations of nitrogen and other relevant solutes in the groundwater at the downgradient boundary of the property and at any other locations deemed pertinent by the SPGA, including downgradient drinking-water wells identified by construction of flow lines from the proposed site.

Such projections shall be based upon appropriate ground water models and the following information or standards:

- Wastewater per person: 7 pounds of nitrogen per year. Persons per dwelling unit: 4.
- Lawn fertilizers: 2 pounds of nitrogen per 1,000 square feet of lawn per year.
- Road runoff: 0.19 pounds of nitrogen per day per lane mile.
- Background nitrogen concentration: actual on-site measurements.
- Hydraulic conductivity: Use on-site data.
- Saturated thickness: Use data from site-specific borings.
- Groundwater gradient: Use data from site-specific measurements.

These projections may not be required, as determined by the SPGA, for projects which involve no on-site discharge other than sanitary waste, and comply with the density regulations of this bylaw.

C. **Review Procedures and Public Hearing:** The SPGA shall refer copies of the permit application to the Board of Health, Conservation Commission, Town Engineer/Highway Superintendent, Board of Selectmen, and the Board of Water and Sewer Commissioners, and shall hold a public hearing as per the provisions set forth in Section VIII.J. of these bylaws.

D. **The SPGA's Decision:**

(a) After the public hearing, the SPGA shall coordinate, clarify and weigh the comments and recommendations of the various Town agencies; consider the simplicity, reliability, and feasibility of the proposed control measures, and consider the degree of threat to water quality which would result if the control measures failed. It shall then issue a written decision. It may grant a special permit if it finds that the proposed use:

- meets the intent of this section as well as its specific criteria;

- will not, during construction or thereafter, have an adverse impact on any aquifer or recharge area in the District;
 - will not adversely affect an existing or potential domestic or municipal water supply; and is consistent with existing and probable future development of surrounding areas, and;
 - groundwater quality at the downgradient boundary of the property shall not be allowed to violate State or Federal drinking water standards.
- (b) In addition to the findings described in (a), above, the decision shall include an explanation of any departure from the recommendations of any other Town agencies.
- (c) For projects which require approval by state agencies and/or the Foxborough Board of Health, the special permit shall include a condition that no building permits shall be issued until evidence has been received by the SPGA that such required approvals have been received.

SECTION VIII

Design And Operations Guidelines:

The following design and operation guidelines shall be observed for sites within any portion of the defined Water Resource Protection Districts:

- A. **Safeguards:** Provision shall be made to protect against toxic or hazardous materials discharge or loss resulting from corrosion, accidental damage, spillage or vandalism through measures such as: prohibition of underground fuel storage tanks; spill control provisions in the vicinity of chemical or fuel delivery points; secured storage areas for toxic or hazardous materials; and indoor storage provisions for corrodible or dissolvable materials. For operations which allow the evaporation of toxic or hazardous materials into the interiors of any structures, a closed vapor recovery system shall be provided for each such structure to prevent discharge of contaminated condensate into the groundwater.
- B. **Location:** Where the premises are partially outside of the Water Resource Protection District, potential pollution sources such as on-site waste disposal systems shall be located outside the District to the extent feasible.
- C. **Disposal:** For any toxic or hazardous wastes to be produced in quantities greater than those associated with normal household use, the applicant must demonstrate the availability and feasibility of disposal methods which are in conformance with all state and federal laws.

- D. **Drainage:** Site design shall result in no increase in the peak rate of storm water runoff in a ten (10) year storm and one hundred (100) year storm. Site design shall result in no increase in the total volume of storm water runoff in a one-year storm event. Impervious materials shall not cover more than twenty percent (20%) of the total area of a single/two-family residential lot and forty percent (40%) of the total area of a non-residential or multi-family lot unless authorized by a Special Permit. Not less than forty percent (40%) of the total area of a single/two-family residential lot and thirty percent (30%) of the total area of a non-residential or multi-family lot shall be maintained in an open and/or vegetated state unless authorized by a Special Permit.

The area left in its open and/or vegetated state shall be located so as to increase distances between impervious surfaces or on-site disposal systems and any surface water body or municipal well. All runoff from impervious surfaces shall be recharged on the site and diverted towards areas covered with vegetation for surface infiltration to the maximum extent possible. Dry wells shall be used only where other methods are not feasible, and shall be equipped with oil, grease, and sediment traps constructed, operated, and maintained in a manner acceptable to the SPGA.

- E. **Monitoring:** Periodic monitoring may be required by the SPGA, based upon the proposed use of the site, including sampling of wastewater disposed to on-site systems or dry wells and sampling from groundwater monitoring wells to be located and constructed as specified in the Special Permit with a report and 5 copies to be submitted to the SPGA who will distribute them to the Town Clerk, Fire Chief, Board of Health, Board of Water and Sewer Commissioners, and the Conservation Commission. The costs of monitoring, including sampling and analysis, shall be borne by the owner or applicant.
- F. **Erosion and Sedimentation Control:** All clearing and earthmoving operations shall occur only while erosion and sedimentation control measures, approved by the SPGA, and/or the Conservation Commission when within its jurisdiction, are in place. Such control measures shall remain in place until the SPGA and/or the Conservation Commission when within its jurisdiction, determines that the danger of erosion or sedimentation no longer exist. Hay bales shall be used as a sole measure where only it has been determined that the danger of soil erosion or sedimentation is minimal.

SECTION IX

Definitions:

- Aquifer:** A formation, group of formations, or part of a formation that contains sufficient saturated permeable material to yield significant quantities of water to wells and springs.
- Area of Influence:** The area which experiences drawdown by a pumping well as plotted on a two-dimensional map surface; usually ellipsoidal in shape.
- Body of Water:** A body of water shall be any open body of water, capable of supporting on indigenors fish population, either naturally occurring or man-made by impoundment, with a surface area observed or recorded within the last ten (10) years and which is never without standing water due to natural causes, except during periods of extended drought. For purposes of this definition, extended drought shall mean any period of four or more months during which the average rainfall for each is fifty (50%) percent or less of the ten year average for that same month. Basins or lagoons which are part of wastewater treatment plants shall not be considered bodies of water, nor shall swimming pools or other impervious man-made retention basins.
- Cone of Depression:** A three dimensional conical concavity produced in a water table by a pumping well.
- Discharge:** The accidental spilling, leaking, pumping, pouring, emitting, emptying, or dumping of toxic or hazardous materials upon or into any land or waters in the Town of Foxborough. Discharge includes, without limitations, leakage of such materials from failed or discarded containers or storage systems, and disposal of such materials into any on-site sewage disposal system, drywell, catch basin, or unapproved landfill.
- Ground Water:** All the water found beneath the surface of the ground. In this bylaw, the term refers to the slowly moving subsurface water present in aquifers and recharge areas.
- Impervious Surface:** Material placed by man that does not allow surface water to penetrate into the soil.

**Leachable
Waste:**

Waste materials including solid waster, sludge, and agricultural wastes that are capable of releacing water-borne contaminants to surrounding environment.

**Mining of
Land:**

The removal of geologic materials such as topsoil, sand, gravel, or bedrock.

**Recharge
Areas:**

Areas that collect precipitation or surface water and transmit it into the cone of depression of existing or potential water supply wells. Primary recharge areas are mapped unconsolidated aquifer areas surrounding existing or potential water supply well sites. Secondary recharge area are till and bedrock areas adjacent to the primary areas which contribute streamflow to streams or undefined water courses or groundwater flowing through or onto the primary recharge areas.

**Sanitary
Waste:**

Wastewaters arising from ordinary domestic water use as from toilets, sinks, bathing facilities, etc., and containing such concentrations and types of pollutants as to be considered normal wastes.

Solid Waste:

Useless, unwanted, or discarded solid material with insufficient liquid content to be free-flowing. This includes, but is not limited to, rubbish, garbage, scrap materials, junk, refuse, inert fill material, and landscape refuse.

**Hazardous
Waste:**

A waste, or combination of wastes, which because of its quantity, concentration, or physical, chemical, or infectious characteristics may cause, or significantly contribute to an increase in mortality or an increase in serious irreversible, or incapacitating reversible illness or pose a substantial present or potential hazard to human health, safety, or welfare or to the environment when improperly treated, stored, transported, used or disposed of, or otherwise managed, however not to include solid or dissolved material in domestic sewage, or solid or dissolved materials in irrigation return flows.

Upland Area:

That area exclusive of wetlands and floodplains as defined within the Wetlands Protection Act Regulations (M.G.L. Chapter 131, section 40 as amended)

APPENDIX C

S-1 ZONING DISTRICT
SOIL POTENTIAL RATINGS

APPENDIX C
EVALUATION OF SOILS FOR URBAN GROWTH
UTILIZING ON-SITE SEWAGE DISPOSAL SYSTEMS

Factors used to assign ratings for each soil are slope, wetlands, water table, permeability, and depth to bedrock. Soil potential ratings are intended to be a guide for planning future wise land use decisions.

These ratings indicate the relative quality of a soil to prevent surface and subsurface pollution of wetlands and ground water.

The following table provides an assessment of each soil type on the site for proper functioning of individual on-site sewage disposal systems. In addition, a separate section describes the various leaching facilities based on soil and site characteristics.

SOIL POTENTIAL RATING CLASSES

o Very High Potential

Performance is at or above "standard" because soil conditions are exceptionally favorable. Installation costs are low and there are no continuing limitations.

o High Potential

Performance is at or above the "standard." Costs of measures for overcoming limitations are judged locally to be favorable in relation to the expected performance. Continuing limitations do not detract appreciably from environmental quality.

o Medium Potential

Performance is somewhat below "standard." Costs of corrective measures are high. Continuing limitations detract from environmental quality.

- o Low Potential

Performance is significantly below "standard." Corrective measures are costly. Continuing limitations detract appreciably from environmental quality.

- o Very Low Potential

Performance is much below "standard." Corrective measures are very costly. Continuing limitations seriously detract from environmental quality.

Footnotes to Soil Potential Rating Table:

- (1) These soils have percolation rates in excess of 30 minutes/inch. Under Title V (State Sanitary Code) these areas are unacceptable for subsurface disposal of sanitary sewage. This does not necessarily mean that these areas are "unbuildable." With extensive on-site investigation suitable locations can often be located on inclusions of other soils within the soil map unit.
- (2) These complexes contain areas of soil that are less than 6 feet deep to bedrock. Title V (State Sanitary Code) requires that there be 4 feet of "naturally occurring pervious soil" below the entire leaching facility. Topsoil and subsoil, which is typically 2 feet in depth is not considered to be pervious. This does not mean that these areas are "unbuildable." Most of these complexes contain other soils that are deeper than 6 feet to bedrock (Charlton and Canton soils) and have characteristics that make them quite suitable for sanitary sewage disposal.
- (3) Steep slopes of 25 to 35 percent make installation of sewage disposal systems economically impractical.

- (4) These soils are usually considered wetlands. Under Title V Regulations Section 15:03, paragraph 7, "Table of Distance Requirements" installation of leaching facilities is restricted within 50 feet (horizontally) of a wetland boundary. In addition, 1982 Wetland Regulations restrict construction operations to within 25 feet of said wetlands. Installing sewage systems in wetland soils is prohibited.

- (5) Soils which occur on floodplains may be subject to Title V Regulations Section 15:03, paragraph 7, footnote 2. The presumption is that no leaching facility can be located within 50 feet of the 100 year flood elevation. This factor is also addressed in the 1982 Wetlands Regulations Section 10:57.

SOIL POTENTIAL RATINGS FOR ON-SITE SEWAGE DISPOSAL SYSTEMS

Map Symbol	Soil Name	Soil Potential Index	Restrictive Soil Features	Recommended Types of On-Site Sewage Systems
113B	Canton fine sandy loam, 3%-8% slopes.	High	None.	Smaller than standard field.
114B	Canton very stony fine loam, 3%-8% slopes.	Medium	Stones.	Additional site preparation.
114C	Canton very stony fine loam, 8%-15% slopes.	Medium	Slope; stones.	Additional site preparation.
114D	Canton very stony fine loam, 15%-25% slopes.	Low	Slope; stones (3).	Additional site preparation.
115D	Canton extremely stony fine sandy loam, 15%-25% slopes.	Low	Slope; stones (3).	Additional site preparation.
99	Freetown muck, ponded.	Very Low	Water table at surface; ponding (4).	No typical corrective measures.
46	Freetown muck.	Very Low	Water table at surface.	No typical corrective measures.
35A	Hinckley loamy sand, 0%-3% slopes.	Very High	None.	Smaller than standard field.
35B	Hinckley loamy sand, 3%-8% slopes.	Very High	None.	Smaller than standard field.
35C, 136C	Hinckley loamy sand, 8%-15% slopes.	Medium	Slope.	Smaller than standard field, grading and/or fill.
35D, 136D	Hinckley loamy sand, 15%-25% slopes.	Low	Slope (3).	Smaller than standard field, grading and/or fill.

SOIL POTENTIAL RATINGS FOR ON-SITE SEWAGE DISPOSAL SYSTEMS (Continued)

<u>Map Symbol</u>	<u>Soil Name</u>	<u>Soil Potential Index</u>	<u>Restrictive Soil Features</u>	<u>Recommended Types of On-Site Sewage Systems</u>
35E	Hinckley gravelly fine sandy loam, 25%–35% slopes.	Very Low	Very steep slope (3).	Additional site preparation, grading and fill.
37B	Merrimac fine sandy loam, 3%–8% slopes.	Very High	None.	Smaller than standard field.
122B	Paxton fine sandy loam, 3%–8% slopes.	Very Low	Percs slowly.	No typical corrective measure (1).
123B	Paxton very stony fine sandy loam, 3%–8% slopes.	Very Low	Percs slowly; stones.	No typical corrective measure.
123C	Paxton very stony fine sandy loam, 8%–15% slopes.	Very Low	Percs slowly; slope; stones.	No typical corrective measure.
32A	Ridgebury very stoney fine sandy loam, 0%–3% slopes.	Very Low	Percs slowly; high water table; stones(1).	No typical corrective measure.
7D	Rock outcrop – Charlton–Hollis complex, 15%–35% slopes.	Low	Bedrock; slopes (2,3).	Intensive on-site investigation with grading and/or fill, and additional site preparation.
8C	Rock outcrop – Hollis complex.	Very Low	Bedrock (2).	No typical corrective measure.
40A	Scarboro muck.	Very Low	Water table at surface(4).	No typical corrective measure.
38A	Sudbury fine sandy loam, 0%–3% slopes.	Low	High water table.	Fill.
45	Swansea muck.	Very Low	Water table at surface(4).	No typical corrective measure.
39A	Walpole fine sandy loam, 0%–3% slopes.	Very Low	High water table (4).	Fill.

SOIL POTENTIAL RATINGS FOR ON-SITE SEWAGE DISPOSAL SYSTEMS (Continued)

<u>Map Symbol</u>	<u>Soil Name</u>	<u>Soil Potential Index</u>	<u>Restrictive Soil Features</u>	<u>Recommended Types of On-Site Sewage Systems</u>
39B	Walpole fine sandy loam, 3%-8% slopes.	Very Low	High water table (4).	Fill.
33A	Whitman fine sandy loam.	Very Low	Water table at surface; ponding (1,4)	No typical corrective measure.
34A	Whitman extremely stoney fine sandy loam.	Very Low	Percs slowly; high water table (1,4).	No typical corrective measure.
81B	Woodbridge fine sandy loam, 3%-8% slopes.	Very Low	Percs slowly; high water table (1).	No typical corrective measure.
82B	Woodbridge very stony fine sady loam, 3%-8% slopes.	Very Low	Percs slowly; high water table (1).	No typical corrective measure.

Land areas mapped as #5 were not noted because these areas have been disturbed to the extent that the natural areas of soil are no longer recognizable and are no longer a major factor in determining limitations or capability of the land.

Land areas mapped as #260 consist of commercial development areas and were not noted.

APPENDIX D

NEWSPAPER ARTICLES

Foxboro curtails growth Development restricted in Route 1, well zones

FOXBORO — Voters at Thursday night's special town meeting overwhelmingly adopted two articles aimed at controlling development along Route 1 and protecting the town's water resources.

Although there was no discussion on the floor regarding the revised Route 1 zoning bylaw, voters spent more than two hours debating the revised Water Resource Protec-

tion District zoning bylaw, which was eventually adopted with an amendment that further tightened restrictions.

Additional uses prohibited

After several residents took the floor speaking for and against the bylaw, William Jobin stood up and urged those in attendance to accept the bylaw with an amendment that would prohibit additional uses in the so-called

Zone III area, which is the land nearest well sites.

The amended article was adopted on a 226-3 vote.

The Route 1 zoning bylaw was approved by a unanimous vote after only a brief presentation by Growth Policy Committee Co-Chairman Don Schmidt.

Details, Page 7

Zoning bylaw for Route 1 passes with little debate

By JULIET PENNINGTON
Sun Chronicle Staff Writer

FOXBORO — The Water Resource Protection Zoning bylaw was the only one of the articles on the seven-article special town meeting warrant that stirred any controversy Thursday night, with the others being voted on with little — if any — debate.

Article seven, which asked voters to act on the proposed Route 1 zoning bylaw, was approved by a unanimous vote after only a brief presentation by Growth Policy Committee Co-Chairman Don Schmidt and no discussion on the floor at the high school auditorium.

The new bylaw is aimed at controlling development along Route 1 and is intended to "promote higher quality growth and higher quality development of the landscape," according to Planning Administrator Timothy Higgins, to whom Selectman Michael Coppola referred as "the unsung hero" in coordinating the various town

The bylaw promotes planned developments — such as office parks — and other uses that will generate a high tax revenue and have a limited effect on town services, said Higgins. Uses that will not be permitted on the approximately 1,000 acres on Route 1 located in the S-1 district include auto auctions, truck terminals, railroad storage yards, and mini-storage facilities.

"We wanted to make sure that we didn't end up with a strip development" such as the heavy retail area along Route 1 in Dedham, said Higgins.

Coppola said the support residents showed for this bylaw "proved that the whole process was not done in a vacuum, and that people did have confidence in the process and the growth policy committee."

Higgins said that while he was "surprised by the total lack of discussion" on the Route 1 bylaw revision, he was "very pleased" with the end result.

"All of the hard work paid off," he said. "Literally hundreds of hours went into this article."

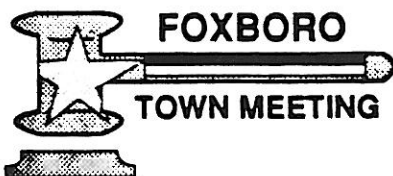
Sun Chronicle

Route 1, water Foxboro topics

Special town meeting unfolds tonight at 7:30

By JULIET PENNINGTON
Sun Chronicle Staff Writer

FOXBORO — The two articles that will be receiving the most attention at tonight's special town meeting are articles six and seven, both of which are bylaw revisions aimed at controlling development along Route 1 and protecting the town's water resources.



The seven-article town meeting will be held at the high school auditorium tonight at 7:30 p.m. and

is not expected to last more than a couple of hours. A quorum of 100 people is required.

The two zoning bylaw revisions will require a two-thirds vote to be adopted.

"I hope people come out and vote for this," said Planning Administrator Tim Higgins.

"Both articles are critical to the future of Foxboro from an economic standpoint, and a water quality standpoint."

Article six asks residents to vote for the revised Water Resource Protection District zoning bylaw that will help protect the town's water supply by restricting uses in the Zone II areas, which could be drilled directly into the wells. The bylaw also affects the Zone III areas, which feed into the Zone II areas and contamination of which could ultimately end up in the town wells.

As an example of how the Zone II district would be protected, Higgins explained that under the proposed bylaw, in the single-family (R-40) district, there must be at least a 60,000-square-foot lot with 10,000 square feet of it being a dry area, or uplands.

Currently, the lots must be at least 60,000 square feet, but there is no requirement on how much of that land must be dry. The proposed zoning changes were developed following a nine-month study by EA Consultants of Cambridge.

Article seven asks voters to approve the proposed Route 1 zoning bylaw that is intended to "promote higher quality growth and a higher quality development of the landscape," said Higgins.

The new bylaw, he said, would promote planned developments — such as office parks — where there could be more than one structure on a lot and the developer would have to lay it out in such a way that it would be not only functional, but attractive as well. "The types of uses we're looking at should generate higher tax revenue and better quality jobs because we're looking at a more upscale kind of growth that will also have limited impact on town services," said Higgins.

(See Foxboro, Page 10)

Sun Chronicle
5/11/89

Foxboro to debate articles

(Continued from Page 9)

He said that under the proposed bylaw, uses that would not be permitted along the approximately 1,000 acres on Route 1 located in the S-1 district would include auto auctions, truck terminals, railroad storage yards, and mini-storage facilities.

Higgins said the proposed bylaw was also intended to prohibit "strip development" such as the heavy retail area along Route 1 in Dedham.

The town has spent \$120,000 for the Route 1 and Zone II studies. The Route 1 study was conducted by HMM Associates of Concord. Selectmen Chairman Jeffrey Peterson said he hopes there is a large turnout for the meeting, mainly because of the importance of the last two articles.

Planning Board Chairwoman Cheryl Darlington said she anticipates some debate — most likely from developers opposed to the restrictions — on the floor when these two articles are voted on.

The local Industrial Development Commission has spoken out against the two articles, saying that both articles should be tabled. "It's a railroading" of town voters, claimed member Joe Welsh, who referred to the water-protection bylaw as "too restrictive" in a letter to selectmen.

Darlington said that developers have been "racing against the clock" to file preliminary and definitive plans before the new, more restrictive bylaws would take effect if passed tonight.

Any plans submitted before tonight's meeting would be granted grandfather status and would fall under the current Route 1 or water protection bylaws, said Darlington.

Of particular concern to some town officials are preliminary plans by two developers who are considering developing auto auctions along Route 1, which is allowable under the current bylaw, but prohibited under the proposed bylaw.

Other articles on the special town meeting warrant include:

- An amendment to the handicapped parking bylaw that would increase fines from \$15 to \$35 for the first offense, \$50 for the second offense and \$75 for the third offense.

- An article asking residents to vote in favor of establishing a fund for a part-time social worker's position at Foxboro Human Services. The cost would be \$14,000.

Foxboro voters to decide

By JULIET PENNINGTON
Sun Chronicle Staff Writer

FOXBORO — Increasing the town's tax revenue base and protecting its water supply are perhaps two of the most important issues that will be facing Foxboro in coming years.

Residents concerned about those issues will have a chance to make a difference by voting at the May 11 special town meeting, when voters will be asked to adopt the newly revised Route 1 development bylaw and the Zone II water protection bylaw.

"These are both critical to the future of this town," said Planning Administrator Timothy Higgins. "We want growth, but controlled growth that will not adversely affect the town."

A two-thirds vote is needed to pass the two major bylaw changes, which have been spearheaded by the growth-policy committee, whose members have accepted the proposed changes along with the planning board.

There have already been \$120,000 worth of long-

'These are both critical to the future of this town. We want growth, but controlled growth that will not adversely affect the town.'

— Planner Timothy Higgins.

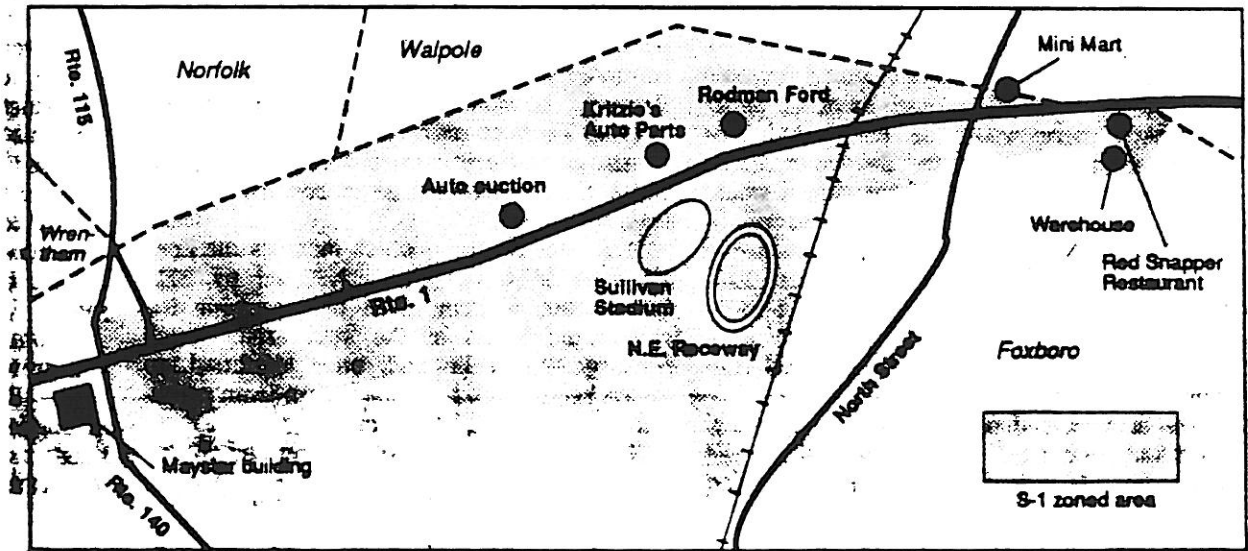
range studies done on these two issues by outside consulting firms hired to make their recommendations on what would be best for the town.

"A lot of time and energy has been spent on this," said Higgins, "and we're happy with the new bylaws as they stand."

The proposed Route 1 zoning bylaw is intended to "promote higher quality growth and a higher quality development of the landscape," said Higgins.

(See *Foxboro*, Page 8)

Route 1's future May 11



Proposed Route 1 zoning bylaw changes will be voted on May 11.

Foxboro to decide Route 1 future May 11

(Continued from Page 7)
Additional goals include:

- improving the access and traffic flow on Route 1 by minimizing the number of access points, or curb cuts, along Route 1;
- increasing town discretion and input into land uses by restricting certain uses and promoting the use of special permits, which are discretionary permits issued by the planning board;
- improving aesthetics and landscaping by attracting a "higher quality" type of development along the Route 1 corridor.

Higgins said the new bylaw would promote planned developments — such as office parks — where there would be more than one structure on a lot and the developer would have to lay it out in such a way that it would be not only functional, but attractive as well.

"The types of uses we're looking at should generate higher tax revenue and better quality jobs ... because we're looking at a more upscale kind of growth that will also have limited impacts on town services," said Higgins.

He said that under the proposed bylaw, uses that would not be permitted along the approximately 1,000 acres on Route 1 located

in the S-1 district would include auto auctions, truck terminals, railroad storage yards, and mini-storage facilities.

Higgins said the proposed bylaw was also intended to prohibit "strip development," such as the heavy retail area along Route 1 in Dedham.

The new zoning techniques and proposed amendments to the existing bylaws should be taken seriously by town voters, warned Higgins.

"Town officials agree that the largest potential expansion of our tax base in the community will come from development along Route 1," he said. "This should be of concern to every Foxboro resident."

Also of concern is the town's water supply, which if not protected could contaminate the town wells.

The Zone II study, which includes the Zone III area in town, was conducted by SEA Consultants, a firm hired to determine the geographic limits of the land areas which recharge the wells and, once identified, to create regulations to protect them from potential contaminating land uses.

This study, known as the revised Water Resource Protection District zoning bylaw,

will help protect the town's water supply by restricting uses in the Zone II areas, which could feed directly into the wells, and the Zone III areas, which feed into the Zone II areas and contamination of which could also ultimately end up in the town wells.

As an example of how the Zone II district would be protected, Higgins explained that under the proposed bylaw, in the B-60 (single family) district, there must be at least a 60,000 square foot lot with 30,000 square feet of it being a dry area, or uplands.

Currently, the lots must be at least 60,000 square feet, but there is no requirement on how much of that land must be dry.

"This is just one of the protective measures included in the bylaw," said Higgins, who claimed that the water protection bylaw was critical to the future water supply of Foxboro. Recommendations available next week

"You can't have growth without water," he said.

Recommendations by the planning board and growth policy committee and summaries of the Route 1 and Zone II bylaws will be available early next week at town hall for residents who wish to review them prior to the

May 11 scheduled town meeting.

MAR 23 1989

NEW ENGLAND NEWSCLIP AGENCY, INC.

165

PT

Hearing tonight on rules for Route 1 development

By Pamela Brennan

Proposed regulations that would tighten building requirements but open up other options for commercial developments along Route 1 will be aired at a public hearing tonight.

HMM Associates of Concord has nearly completed its recommendations for changes in the zoning bylaw, as they affect the Route 1 commercial "S-1" district.

The hearing will begin at 8:30 in the Town Hall meeting room.

Approval or disapproval of the regulations will be up to voters at a Special Town Meeting to be held within the May 8 Annual Town Meeting.

Proposed regulations in the S-1 district include a larger lot size, buffer zones and use requirements. But builders who seek more flexibility can, in certain cases, opt for a "planned development" approach.

HMM representatives met with members of the Growth Policy Committee last week to go over the recommendations and consider last-minute changes.

The Committee reduced a recommended seven-acre minimum lot

size for builders seeking the "planned development" option to five acres.

Because of this change, more parcels would qualify for negotiation under that process.

Approval of that layout would come under the authority of the Planning Board, and would be similar to the subdivision approval process.

Developers who did not opt for a planned development layout would have their proposal subject to site plan approval, which takes less time.

The current ceiling of 25 percent retail store area in any proposed development was left in the proposed bylaw, despite comments that the low percentage could discourage some developers.

The limit on retail space is intended to reduce traffic.

According to the new planned development option, however, builders could ask for approval to make as much as 50 percent of their proposed site retail.

Another section would prohibit parking lots along the front of buildings which face Route 1.

2876
Roerbach

Consultants propose one-third increase in lot sizes on Route 1

Hearing to be held April 23 before Town Meeting vote

By Pamela Braman

Minimum lot sizes along Route 1 would be increased by one-third under zoning bylaw recommendations released last week by HMM Associates of Concord.

This and several other recommendations concerning frontage and lot coverage would result in more open space on building sites.

A public hearing on the recommendations has been scheduled for April 23. Voters will consider the proposed zoning bylaw change at a Special Town Meeting within the May 8 Annual Town Meeting.

The recommendations are also scheduled to be discussed this week by the Growth Policy Committee.

Though much of HMM's report includes recommendations already

outlined in February to that Committee, there are a few new specifics in the final outline.

HMM, in conjunction with Edith Netter Associates, says that the proposed recommendations "better address the town's objectives for land development along the Route 1 corridor."

In response to concerns voiced by the members of the Committee, the recommendations include prohibiting the use of rail storage yards, automobile storage businesses and automobile auctions in the S-1 (Route 1) district.

Also, so-called medium hazard uses and industrial uses, which are now permitted in the S-1 district, would become subject to Special Permit requirements.

In order to "to assure better planning and site layout in the district," recommendations were made to change density requirements in developments which are proposed. These recommendations include:

- Increasing minimum lot size from 60,000 to 80,000 square feet.
- Increasing minimum frontage along Route 1 from 200 feet to 300 feet.
- Increasing minimum front yard and side yard requirements.
- Increasing maximum lot coverage from the 40 percent present maximum for building coverage, to a maximum of 70 percent for total coverage, including building and paved areas.

• Requiring parking lots in the S-1 District to be located only at the side or rear of buildings.

• Requiring a non-waivable landscaped buffer strip of 50 feet in the front, and 25 feet in a side yard, for all proposed uses.

The recommendations also included adding three new conditions to the Site Plan Review checklist in the S-1 District.

These new items deal with the protection of natural, historic and scenic areas, the development's possible impact on the town's water, sewer and roads, and the fiscal impact on town services.

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APR 20 1989

NEW ENGLAND NEWSCLIP AGENCY, INC.

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Goal: attractive development of Rte. 1

By Shanta Swezy
The Patriot Ledger

FOXBORO — Officials say they have a plan to keep Route 1 in Foxboro from looking the way it does in Norwood and Dedham.

They will ask the May 11 special town meeting to approve a bylaw that would restrict what is known as "strip development" — fast-food restaurants, car dealerships and blocks of stores built near the edge of the road.

"We don't want it to be one strip development after the next," Planning Administrator Timothy Higgins said yesterday. "Not only is it unsightly, but it's quite dangerous, with curb cuts (driveways) every 50 to 100 feet, very little landscaping, buildings right on top of the road and paving from the curbing of the street right to the front door of the buildings. We want to get away from pavement to pavement. It's not attractive."

Route 1 in Saugus and Route 9 in Natick and Framingham are prime examples of what town officials do not want Foxboro to look like, planning board Vice Chairman and growth

Foxboro

policy committee Co-chairman Michael Coppola said yesterday.

"The main horror of Route 9 is the traffic plus the constant visual sight of the same thing lot after lot, row after row," Coppola said. "It reminds me of a line of soldiers or a picket fence with the same thing mile after mile. It's not visually appealing."

Coppola cited developer Demetrios Panagoulas' Hercules Shopping Plaza at the corner of Route 1 and North Street as an example of an existing strip development in Foxboro.

"It's nothing more than a strip of shops facing the street," Coppola said.

Having one or two strip developments is acceptable, but having continuous lines of them is not, he said.

The proposed bylaw was developed following a six-month study by HMM Associates of Concord. The \$20,000 study was paid for by the state.

The growth policy committee and the planning board unanimously approved the proposal a couple of weeks ago. To be adopted, it needs a two-thirds vote of town meeting.

The proposed bylaw encourages a mix of offices, industry and retail businesses.

It would:

- Limit the number of driveways connecting each development with Route 1.
- Require larger buffer zones, which would prevent developments from being built close to the highway and provide open space between developments.
- Offer incentives to developers to push growth onto parcels of five acres or more.
- Require special permits for certain types of development, including hospitals, private schools, country clubs and recreation facilities. This would give the town additional control over what is built.
- Allow 50 percent of a planned development to be for retail use. Under the current bylaw, 25 percent of a building's floor area can be retail.

"Our goal is not to limit growth but to promote good growth," Higgins said.

The bylaw would prohibit automobile storage businesses, automobile auctions, rail storage yards, mini self-storage warehouses and most other warehouses, and truck terminals.

"If the bylaw is not enacted, we would see those things occur which don't generate a high amount of taxes, don't create large numbers of jobs but do create a large increase in traffic," Higgins said.

"What we would like to have is high-yielding, tax-producing developments," Coppola said. "What we don't want is a little shack with three acres of paving."

If the Sullivan Stadium parking lots are considered undeveloped land, 25 to 30 percent of the property along Route 1 in Foxboro has been developed, Higgins estimates.

He said intensive development has not reached Foxboro because of the town's distance from Boston and Providence.

However, it is only "a matter of time before it (development) comes out here," he said.

APR 6 1969

NEW ENGLAND NEWSCLIP AGENCY, INC.

REPORTER, THURSDAY, APRIL 6, 1969

2876
Roorbach

More stores allowed under Route 1 plan

In the Growth Policy Committee's review last week of recommendations for the Route 1 development district, a provision to double the current retail space allowed in already approved sites was accepted.

That suggestion, along with some other modifications to recommendations made by HMM Associates, was approved by separate unanimous votes of the 10 members present.

In the past, members of the Com-

mittee had stated concerns that the town's present maximum of 26 percent retail space in any development might be discouraging some businesses from locating along Route 1.

Some members felt that large office groups prefer to locate in an area where retail stores are nearby, for the convenience of their employees.

On the negative side, a greater percentage of retail space on a site

can generate more traffic, and more security problems, in an area.

The change in retail percentage will affect any site along Route 1 which was already approved for non-residential development prior to the public hearing held on the Route 1 recommendations on March 23.

In the future, developers of projects involving five acres or more can apply for an exception to the town's 25 percent maximum for retail uses, by opting for Planned Developments approval.

The Growth Policy Committee's vote also included modifying two other recommendations made by HMM concerning the S-1 zoning area:

One recommendation made included changing the maximum allowable height of a building in a Planned Development scheme from 70 feet to 60 feet, or about four stories.

Only buildings in developments of five acres or more which opted for Planned Development approval by

the Planning Board could be built to this maximum height.

Other developments coming under site plan approval can be no higher than 40 feet.

Also changed was a recommendation that would have prohibited parking lots from being placed in front of buildings, unless that building was sited parallel along the length of the highway.

Instead, developers will be allowed to place buildings facing Route 1, and with parking in front, as long as a 75-foot buffer zone between the parking lot and the highway is maintained.

The Growth Policy Committee also agreed unanimously on Wednesday to support the revision of the Wetlands Protection District bylaw agreed upon by the Water Commissioners and the Planning Board.

A study of that bylaw and an update of the Wetlands Protection District was recently completed by SEA water conservation.

Panel near decision on growth advice

By JULIET PENNINGTON
Sun Chronicle Staff Writer

FOXBORO — After several months of discussions with a consulting agency, growth policy committee members believe they are close to making their recommendation on what type of Route 1 development would be best for the town.

While no final decision has been made, committee members indicated that they would like to see Route 1 developed with office parks and a minimum amount of retail.

One of the main objectives, said committee Co-chairman Michael Coppola, is that any development along Route 1 be aesthetically pleasing and that it conform to the "small-town" atmosphere Foxboro wants to maintain.

Any development should also provide a strong tax base for the town, he said.

2/2/89
HMM Associates, the firm hired by the town to study Route 1 and make recommendations to the committee on development options for the largely undeveloped S1-zoned area, told committee members Wednesday night that they would like to see a modification of existing bylaws whereby developers would have to go through a site plan review with the planning board before selectmen issue a building permit.

"We seem to be heading in the direction of planned development, where the developer has flexibility but the town can use discretion," said Coppola.

Committee members hope to have a zoning bylaw recommendation ready by the beginning of March so public hearings can be held on their decision and an article can then be placed on the town warrant for May town meeting.

Recommendation made for Route 1 development plans

Two recommendations made last week to assure for good planning in the development of the Route 1 area, included tightening up the site plan review process in the S-1 districts, and increasing the percentage of retail stores which can locate in any new developments.

Current zoning allows for developments on lots of 50,000 square feet and above, a lot size which has the potential to lead to smaller "strip" developments.

The town has a requirement allowing only 25 percent of any proposed commercial development in the S-1 districts to consist of retail stores. This requirement serves to promote the building of office space, or research and development complexes in the Route 1 area.

The present retail space requirements discourage large retail chains from building in the area. It is these large chains, however, which impact most on a commercial area, through traffic concerns, use of public utilities and public safety issues.

According to legal consultant Edith Netter, who is associated with environmental planner HMM Associates, Inc. of Conway, the town's current site plan review process is actually a site plan "approval" process, whereas the developer is presumed to have the right to build his project.

Unless huge problems present

themselves, says Netter, projects are usually given approval.

According to HMM project manager Mitchell Fischman, "There doesn't seem to be enough handle on that process to prevent the applicant from feeling he is entitled to approval."

Netter suggested that the S-1 zoning area could especially profit from a tightening up of this process, either by injecting more specifics into the "checklist" referred to by Selectmen in their review, or by turning the site plan review process over to the Planning Board in that

specific area of town. In addition to the site plan process change, other recommendations presented by HMM last week to the Growth Policy Committee, included substituting a Special Permit for the Special Use Permits in the S-1 district.

2/9/88

MAKE A TIMELY INVESTMENT IN YOUR HEALTH THIS SPRING.

Southwood Community Hospital sponsors many courses, workshops, lectures, screenings, and support groups throughout the year concerning health and healthy ways of living. We hope you'll refer to our Calendar of Events for current programs and services in your community, and will post it in your home or office as a healthful reminder.

FRIENDS OF SOUTHWOOD

The Friends of Southwood Community Hospital is a group of area residents and community leaders who are dedicated to the betterment of The Cancer Care Center at Southwood Community Hospital.

SUNDAY, MARCH 19
Springtime Brunch - 10:30 a.m.-2:00 p.m. Come and enjoy a brunch at Southwood Community Hospital that will include breakfast and luncheon items. Proceeds will benefit Hospice Care. Fee \$14.95 for adults and \$6.95 for children. For further information or reservations call (508) 668-0385, x327.

AUXILIARY PROGRAMS

Programs to learn and enjoy at the same time.
THURSDAY, MARCH 9
Spring Fashion Show - 6:30-10 p.m. Join the Southwood Community Hospital Auxiliary at their Spring Fashion Show at the Sheraton Millford Inn. Tickets are \$25 per person and include the fashion show and dinner. For further information or for tickets call (508) 528-2569 or 528-4117.
THURSDAY, MARCH 9 & 16 7-10 p.m. Participants meet at Southwood Community

Give the
Love Struck GARFIELD Bouquet.



Diabetes Prevention - 7-11
Lodge, Foxboro Prereg. Call (508) 668-0385, x3 THURSDAYS
Drug Abuse - 7-30
Lodge, Foxboro Free. Family Recovery Sleep at NORCAP Lodge, Foxboro. Call (508) 543
Stress Management - SATURDAYS & SUNDAYS
Narcotics Anonymous THURSDAYS & FRIDAYS
Stress Management - THURSDAYS
NORCAP patients - 8 9:30 p.m. Call (508) 543
Family Recovery Sleep - THURSDAYS
NORCAP patients - 8 9:30 p.m. Call (508) 543
Family Recovery Sleep - THURSDAYS
NORCAP patients - 8 9:30 p.m. Call (508) 543
Family Recovery Sleep - THURSDAYS
NORCAP patients - 8 9:30 p.m. Call (508) 543

SCREENINGS

The prevention and early detection of disease can ensure effective treatment and better health.

FRIDAY, MARCH 3
Hypertension Screening - 1-3 p.m. Free blood pressure check. Call (508) 668-0385, x400.
THURSDAY, MARCH 16
Diabetes Screening - 1-3 p.m. Pre-registration required. Call (508) 668-0385, x400.
THURSDAY, MARCH 23
Male Genito-Urinary Cancer Screening - 3:30-5:00 p.m. For males 18 and over, the clinic is designed to detect the early signs of cancer of the kidneys, prostate, testes and bladder. Screening will be performed by a urologist and include a lab test. No fee. Pre-registration required. Call (508) 668-0385, x400.
QINGONG
Colorectal Cancer Screening - Program for people over 40. Appt. required. Call (508) 668-0385, x400.
Screening Mammogram - Screening mammography program. Appt. required. Call (508) 668-0385, x400.

SUPPORT GROUPS

Meet at Southwood Community

PROFESSIONAL PROGRAM
Designed for

Foxborough Reporter
12/22/88

Soil may not handle Rt. 1

Growth Policy Committee member Joan Sozio said last week the town should consider allowing commercial development in a different area than Route 1.

"I know it's hard to change zoning," said Sozio last Wednesday evening, "but it doesn't look as though Route 1 is going to fulfill all our expectations."

Sozio was referring to information the committee had been given earlier that evening, by HMM Associates, Inc., regarding the

types of soils found along the highway. The firm has been contracted to formulate a specialized growth management plan for parts of Route 1.

HMM Associates said a compilation of soil tests done in the past showed that much of the area was not considered suitable for conventional on-site septic systems, especially not in the numbers that would accompany development.

And, as Building Commissioner Art Folsom stated at the same meeting, the town is

commercial development

"hurting, and we need to expand the tax base. We need to see what we can do on Route 1."

Sozio wondered, though, if there was another area in town more conducive to commercial growth. In addition to the not-so-promising indications of the soil study, she said, a recent update on a water study also in progress has indicated that the town wellfield on Route 1 is also particularly susceptible to contamination.

Sozio's comment was made near the end of

a presentation by HMM Project Manager Mitchell Fischman and Environmental Planner Gretchen Roorbach, who encouraged committee members not to give up on the possibility of development in the area.

If approval could be obtained for the siting of three or four small septic treatment plants, the area could be serviced quite well, said Fischman and Roorbach. If this avenue was pursued, development of the area could still take place.

Area

Septic woes may hinder Route 1 development

By JULIET PENNINGTON
Sun Chronicle Staff Writer

FOXBORO — A preliminary report presented by HMM Associates to the growth policy committee indicates that a large portion of Route 1 is not conducive to on-site septic disposal.

Planning Director Timothy Higgins said that constraints on the area — including a well site and an “enormous amount” of ledge and clay would “preclude a treatment facility” in the area that the committee is trying to decide how best to develop.

The committee is having studies conducted on the area so they can use the information to guide them on the recommendations for zoning bylaw changes that will be voted on at the May town meeting.

“The bottom line is we’re hurting (financially) and we need to expand the tax base,” said commission member and Building Inspector Art Folsom to board members Wednesday. Folsom claimed that whatever zoning bylaws or other restrictions were made, the land should be “attractive” to commercial developers “or else we’re going to be facing an override (of Proposition 2½).

HMM Associates is the consulting firm hired by the town to help the committee gear the town’s growth in a direction that would be most beneficial.

In a report on the Route 1 area, zoned “S-1,” HMM project manager Gretchen Roorbach discussed the potential zoning buildout of Route 1; the traffic and sewer impacts that could occur; and area regulatory controls that may be appropriate.

She only presented the committee with the most extreme case scenario — if Sullivan Stadium and the raceway were both gone and that land was developed for office and retail use.

She said that not only was there an inadequate lack of water to accommodate a “total buildout” of the area, but there was also inadequate sewer facilities.

“We had a soil scientist look into what kind of sewer system could be used...and he found that the area can’t absorb on-site septic (waste),” she said.

Higgins explained that water has to be able to percolate through the soil and much of the area has ledge and clay that won’t absorb liquid.

Roorbach is also preparing two other case scenarios to present to the committee — one that would have the stadium remain, but the raceway go and another if they both remained.

“Because of a change in the circumstances (K-Corp buying Sullivan Stadium), we need to see the buildout potential of the area with the stadium remaining,” said committee co-chairman Michael Coppola.

HMM planning director Mitchell Fischmann cited a couple of ways to lure developers while at the same time protecting the area while the town is researching the zoning bylaw changes.

One way would be to have an interim zoning overlay district, which would work in conjunction with the current underlying zoning so controls would be in place during the interim until the town adopts new zoning regulations.

The principle advantage to this, said Mitchell, is that it is temporary (two years) and would allow for a flexible, discretionary review process by the committee.

Another way, he said, would be to have incentive zoning, where the developer provides the community with a public benefit, such as affordable housing or open space, in exchange for permission to build a project that is larger than that which would otherwise be permitted by zoning.

11/17/88

Study will consider Route

By Pamela Braman

What life would be like for Foxboro without the stadium was one of the issues topmost on the minds of the Growth Policy Committee last week, as members discussed with representatives of HMM Associates, Inc. of Concord, a management plan being done of the Route 1 area. HMM was hired about a month

ago to perform the much-awaited study, which will examine the town's capacity for growth along Route 1, and the ramifications of that growth.

The study is expected to include recommendations by legal counsel assisting HMM as to measures the town can adopt to protect the town, and to encourage developers to

share the costs associated with growth.

Other issues brought up by Committee members as being important to the town were the protection of the water wells on Route 1, and the careful management of growth along the commercial strip. Foxboro wants to increase tax revenues by allowing development in that

1 development potential

area, but there are many other qualities the town wants to retain along with that growth.

Committee members told HMM at a preliminary meeting held last week that they had not yet decided exactly what kind of development they wanted to encourage on Route 1. They indicated they were sure of some things they did not want,

however, including a car auction such as the one further north on Route 1 in Walpole, or expansion of the Conrail yard in Foxboro.

Concerning the possible loss of the Patriots team at the stadium, HMM Project Manager Mitchell Fischman told the Growth Policy Committee that he could, as part of the plan's worst case scenario, include

the implications and possibilities for development if the stadium reverted back to the town at a later date.

Because the large parking lots around the stadium are owned by the owners of adjacent Foxboro Raceway, not the town, the owners could use the land for development. The land the stadium sits on, how-

(Please turn to page 2)

Route 1 development

(Continued from page 1)

ever, is owned by the town, though rights to it have been written off in a lease until after the year 2000.

If the stadium were to close, the feeling among town officials is that the actual stadium structure could revert to the town also. Growth Policy Committee members wondered if HMM could include recommendations for uses for the site.

Fischman said that HMM would probably have a report put on paper about January 31, allowing enough time for the town to study it and make recommendations before May Town Meeting. The project manager said that the scope of the plan

showed the town was on a tight schedule.

Fischman also said the \$20,000 cost for the study, being paid for with a grant from the state Executive Office of Communities and Development, would not allow for the gathering of very much new data. HMM will utilize build-out figures arrived at by the Metropolitan Area Planning Council (MAPC) as part of a town-wide growth management plan it is working on.

Along with Fischman, Assistant Project Manager Gretchen Roorbach and Counsel Edith Netter will be working on the HMM study for Foxboro.

