

# **GENERAL DEVELOPMENT PLAN**

**APRIL 1995**

**FITCHBURG CENTER CORPORATION**  
2800 SOUTH FISH HATCHERY ROAD  
MADISON, WISCONSIN 53711

# **General Development Plan**

April 1995

Fitchburg's Planning Commission recommended adoption of this plan to the City Council on April 18, 1995. The City Council adopted it in two readings on April 25, 1995 and May 9, 1995.

**Fitchburg Center Corporation**  
2800 South Fish Hatchery Road  
Madison, Wisconsin 53711

Second Printing

## TABLE OF CONTENTS

	Page
Preface	i
1. Introduction	1
2. Regional Context	4
3. The Local Context	12
4. The Site and Its Characteristics	22
5. The Institutional Constraints	27
6. The General Development Plan	30
7. The Planned Environments	43
8. Environmental Guidance and Controls	51
9. The Implementation System	56
10. Impact Analysis	61
City Ordinance/GDP Cross-reference Sheet	65

### FOLD-OUT MAPS AFTER TEXT:

11. Site Characteristics
12. Institutional Constraints
14. Land Use
15. Infrastructure
18. Implementation System
19. Proposed Zoning Changes

## I. PREFACE

The Fitchburg Center General Development Plan evolved over a period of a year and a half as a collaborative effort of the Summit Group consultant network. The participants were:

Leo Jakobson AICP SAFA, Professor Emeritus of Urban and Regional Planning, The University of Wisconsin, Madison and founder and convenor of the Summit Group.

Daniel Alesch Ph.D., Professor of Planning and Business Administration, the University of Wisconsin, Green Bay.

Thomas E. Nutt-Powell Ph.D. AICP, President, Capital Needs Unlimited, Brookline, Massachusetts.

Leonard Ortolano Ph.D., UPS Foundation Professor of Civil Engineering, Stanford University, Stanford, California.

David Rousseau DES BArch MASA, President, Archemy Consulting Ltd., Vancouver, B.C.

Professor Jakobson served as chief consultant and coordinator of the plan formulation process from its inception during a three-day brainstorming session in November of 1993, through several presentation and discussion sessions with the City's Planning Commission, Economic Development Commission and Park Commission as well as neighborhood organizations. However, the final version of the plan presented herein does not contain any major changes from the sketch plan which emerged from the brainstorming session in November of 1993. All changes are minor adjustments in response to city and neighborhood needs and expectations.

The plan was submitted to the City for adoption as three zoning changes with the plan document justifying the changes and satisfying the documentation requirements of the Planned Development District provisions of the City's Zoning Ordinance. The cross-

reference sheet, appended to this report, was developed to facilitate the use of the General Development Plan report as a zoning tool. The official zoning ordinance amendment resolution states:

“Approval of this ordinance is subject to and based on the following information received from the applicant, and which information is hereby incorporated as if it were a part of this ordinance:

- A. Document “The General Development Plan” dated April 1995, 64 pages and size 11”x 17:” maps.
- B. City Ordinance - General Development Plan cross-reference.”

After a public hearing on April 18, 1995 with strong support from the audience the Planning Commission voted unanimously to recommend approval of the zoning changes to the City Council. The Council approved the changes unanimously in two readings on April 25 and May 9, 1995.

In conclusion it is of interest to note the following comments from Thomas D. Hovel, the City’s Zoning and Planning Administrator, in his report to the Planning Commission in August, 1994:

“Needless to say, the proposal is quite remarkable and in detail quite different from anything we have had put before us. Certainly their housing concepts will provide a market niche rather different for any existing land division within the City.

The proposal is a true PDD, incorporating the ideas for mixed-use, reduced right-of-way and limited public roads with construction on wooded hillsides to follow performance standards. Flexibility is the key so as to produce structures in harmony with the environment by utilizing not just 1 or 2 family buildings, but undertaking construction in accord with what the site best dictates. Limitation on plant materials will also work to provide a plant cover that is more natural to this area.

This is a very interesting proposal and it may represent the thinking one needs to have as we approach the 21st century, rather than looking back to the 19th century. The City has always tried to find development that would be unique and different and we now have a proposal that would represent a major departure from our typical suburban land use pattern.”

## 1. INTRODUCTION

Fitchburg Center is a 380+ acre site located in the north central area of the City of Fitchburg. The site is characterized by gently rolling hills and dramatic vistas, open fields and heavily wooded areas, water courses and wetlands, and existing development of service, civic, business and biotech uses prompted in large part by Fitchburg's Tax Incremental District #2. This General Development Plan for the site is premised on the following four precepts. Unified application of the precepts is possible because the site is under the control of a single owner who expressed his views about development as follows:

**"In all aspects environmental concerns are given the highest value. Building design, layout and quality of materials reflect a perspective of looking ahead 50 or 100 years, not just the next 3-5 years as is typical of most real estate developers. We have the patience and economic structure to do it right, to see that each step is taken with thought, and caring for the nature which surrounds us" ( Bill Linton in Promegazine, September, 1993, pp. 1-2 ).**

### PRECEPT 1 -- SITE-GUIDED DEVELOPMENT

The natural features of the site, its location in the Fitchburg/Madison socioeconomic and cultural systems, and its existing built form serve to set parameters within which responsible development can occur. The specific nature of development for any given portion of the site emerges from the human and environmental needs and possibilities of a given time, shaped by the preceding development at the site, in the City and in the region. Key defining attributes of the site include:

- ***Drainage as the dominant environmental feature*** -- The rolling hills, open fields, wooded areas, and proximity to environmentally sensitive spaces and uses establish natural features as the dominant consideration in site development. Terrain and the flow of water establish the context for all future built and natural form.
- ***Central location in Fitchburg and in southern part of Madison region*** -- By virtue of the nature of development in Fitchburg and the Madison region over time, the Fitchburg

Center site is centrally-located within the City and the southern part of the region, providing a location for business, industry, service, civic and residential uses. Spatial development in the Madison region is nodal; Fitchburg Center is a key node within the region.

- ***Complementary of business and other uses*** -- Fitchburg Center already has a multi-use development tradition. This tradition incorporates the recent large-scale specialized industrial development represented by Promega. It includes civic and service uses such as day care and the community center. There is a long tradition of sensitive attention to delicate environmental features. Therefore retail, service businesses, industrial incubators, scientific research, educational initiatives and residences can all exist in a harmonious and complementary fashion at the site.

### **PRECEPT 2 -- PERFORMANCE STANDARDS TO MEASURE ACCEPTABILITY**

The natural and built systems of Fitchburg Center now thrive. They can continue to thrive in a strong and complementary fashion by the use of *performance standards* to measure the acceptability of any given development activity. In performance-based regulations the provisions are qualitative instead of quantitative. In instances where calculations are made to ascertain if the limits of social, environmental or aesthetic tolerance and acceptability are met, the calculus should contain more than one consideration given by general reference without codifying specifics.

### **PRECEPT 3 -- FLEXIBILITY IN SPECIFICS**

Rigidity in plan application only contributes to the probability of failure. When guided by the precepts of specifics growing out of site qualities, and contributing in a manner which enhances the quality of built and natural forms and the nature of life which occurs in and around them, each specific component can be vibrantly responsive to the nature of needs understood in the context of human evolution. Among key elements for flexibility are:

- ***Density*** -- The specific intensity of use will be a function of the carrying capacity of the specific parcel measured by the objectives to be met at the location. From the perspective of environmental sensitivity, for example, the count of bedrooms is more important than the count of dwelling units, as the former is a close proxy for the impact of humans upon natural features, notably water distribution, use and disposal after use.
- ***Non-porous surfaces*** -- The key factor influencing drainage is the interruption of the natural process of water absorption and/or runoff. The nature of roadways, parking, building roofs and so on need to be able to be flexibly designed to provide for solutions which best meet the environmental performance objectives of water for the site as a whole and each development component.

- *Integration of uses* -- The extent of separation or combination of varying types of land uses must respond to environmental and social objectives. Education can be both non-proximate (using computer and television links) or highly personally interactive, requiring residential as well as classroom/seminar/workshop space. International business similarly can require extensive personal interaction, with specialized support systems (conferences, hotel, residential suites, restaurants, etc.).

#### **PRECEPT 4 -- TIMELINESS OF DECISIONS**

An evolutionary development approach involves continuing awareness of and responsiveness to the physical and human environments within which the endeavor is occurring. Desired outcomes necessitate timeliness in posing and resolving matters for decision. Use of the General Development Plan as an overall guide and a subsequent combination of site plan review and Planned Development District procedures for plan implementation is in large part a mutual pledge of the public and private sectors to seek in a partnership-type manner the best results at each stage, reflecting a spirit of trust and mutual respect. It is expressly recognized that certain decisions when made will then establish essentially unalterable constraints for future actions. A clear decision format and sequence is the best assurance to all parties that the outcomes sought will most likely be accomplished, with all parties assured of the manner of input and the time and criteria for decisions.

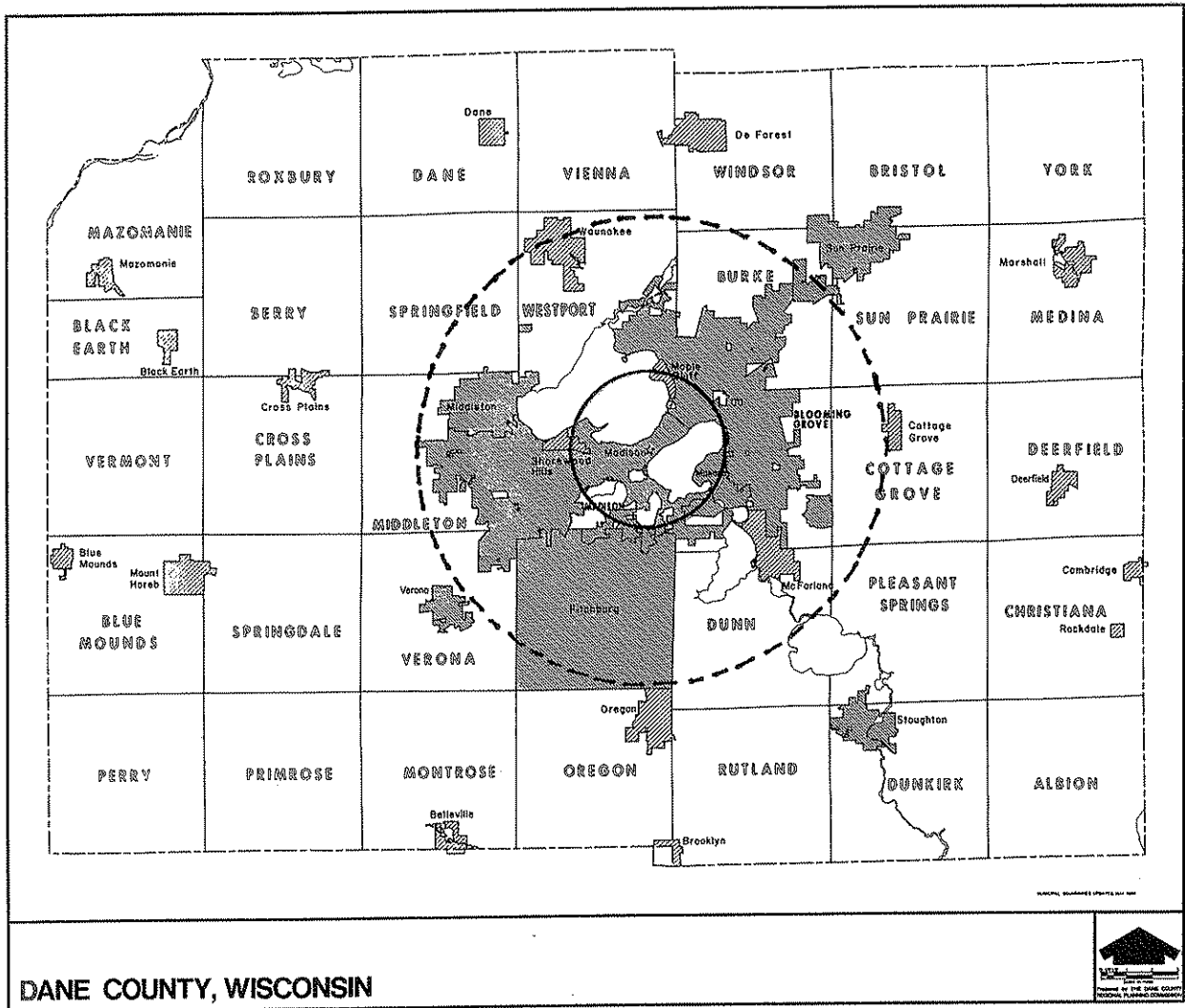
The General Development Plan for Fitchburg Center is examined in the context of its regional and city wide setting, the natural and man made characteristics of the site, the current zoning and other regulations affecting the site, the nature of and rationale for the various plan elements and the various means of plan implementation. The concluding section assesses the various impacts of the plan on the city, the surrounding area and the site itself.



## 2. THE REGIONAL CONTEXT

Dane County, of which Fitchburg is a part, represented the fastest growing county in the State during the 1980's. As a Standard Metropolitan Statistical Area, its growth rate of 13.6 % was well above the 8.6 % growth rate of the 61 metropolitan areas in the 250,000 - 500,000 population range and was one of the fastest growing medium-sized metropolitan areas in the Nation. There are reasons for this growth. First of all, the Madison area has a virtually "recession proof" economic base due to its three main components, state government, the University of Wisconsin, and medical services, which are less affected by economic fluctuations than most other industries. Madison also has a high profile for "good living" and other amenities that attract small firms and individuals to locate in the Madison area. Proximity and easy access to Milwaukee and Chicago are also part of the attraction of Madison.

Fitchburg holds a commanding role in this growth picture with a substantial market share of the population growth in the three to nine mile ring of contiguous suburban development surrounding the metropolitan core. This ring of inner suburbs accounted for 56 % of all growth in the county during the 1980's. Fitchburg's share of that growth was 15 %, about twice as high as the growth in any comparable area except for the far southwest side of Madison. Map 1 and Table 1 on the following pages shows Fitchburg within the context of the geography of population growth of Dane County and by distance from the metropolitan center. The table also shows that on the basis of the Official Population Estimates for 1993 (made by the Demographic Services Center of the State's Department of Administration) the strong growth of the metropolitan area and of Fitchburg has continued. However, there is a significant shift in the spatial distribution of growth. While the Metrocore, as expected, continues to lose market share, the ring of inner suburbs of which Fitchburg is part, has begun to lose market share with their share declining from 56 to 47 percent. Growth is shifting to the peripheral cities, villages and towns which increased their share of growth from 34 to 48 percent. In this shift towards the periphery the important factor for the Fitchburg Center project is that the town and village of Oregon are among the five fastest growing areas in the county. This enhances the location of the Fitchburg Center site by increasing the population to the south and thus providing for a more balanced market area.



**Map 1 Metropolitan Growth Rings**

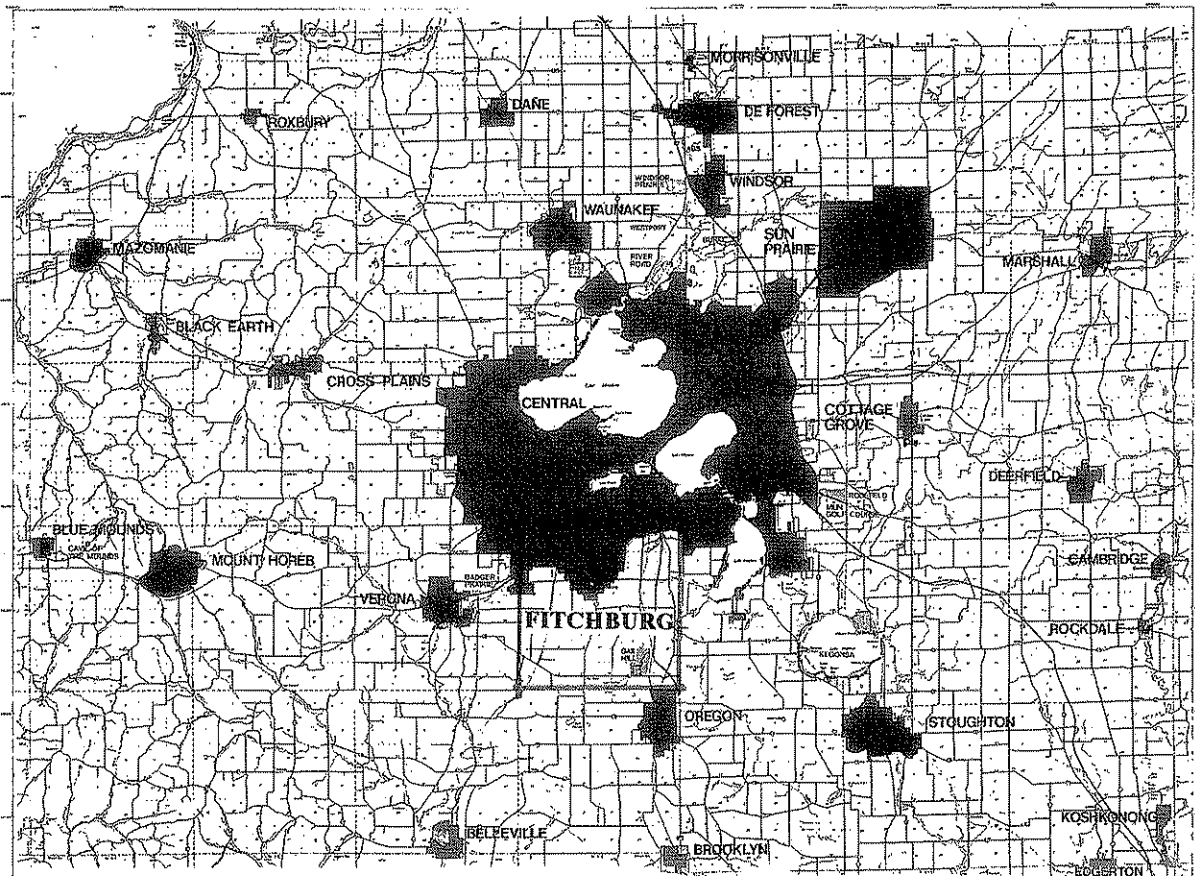
	Population 1970	Share %	Population 1980	Share	Population 1990	Share	Increase 1970-80	Share %	Increase 1980-90	Share %	Projected 1990-93	Share %
<b>Metrocore</b>	<b>101337</b>	<b>34.9</b>	<b>88967</b>	<b>27.5</b>	<b>93690</b>	<b>25.5</b>	<b>-12370</b>	<b>0.0</b>	<b>4723</b>	<b>10.8</b>	<b>941</b>	<b>5.8</b>
<b>West</b>												
West Madison	38806		43094		53387		4288		10293		2111	
Middleton City	8286		11779		13785		3493		2006		749	
Total	47092	39.7	54873	38.2	67172	40.0	7781	31.1	12299	50.8	2860	38.0
<b>North</b>												
Westport	2100		2748		2732		648		-16		170	
Waunakee	2181		3866		5897		1685		2031		711	
Burke	1742		2967		3000		1225		33		98	
North Madison	23505		23279		24104		-226		825		1060	
Total	29528	24.9	32860	22.9	35733	21.3	3332	13.3	2873	11.9	2039	27.1
<b>East</b>												
East Madison	22386		23060		24950		674		1890		1060	
Blooming Grove	1608		1965		2079		357		114		5	
Total	23994	20.2	25025	17.4	27029	16.1	1031	4.1	2004	8.3	1065	14.2
<b>South</b>												
South Madison	1812		4071		5413		2259		1342		106	
Madison Town	5819		6162		6442		343		280		102	
Mc Farland	2386		3783		5232		1397		1449		292	
Dunn	3391		4966		5274		1575		308		124	
Fitchburg City	4704		11973		15648		7269		3675		1036	
Total	18112	15.3	30955	21.5	38009	22.6	12843	51.4	7054	29.1	1558	20.7
<b>Inner Suburbs</b>	<b>118726</b>	<b>40.9</b>	<b>143713</b>	<b>44.4</b>	<b>167943</b>	<b>45.8</b>	<b>24987</b>	<b>54.7</b>	<b>24230</b>	<b>55.6</b>	<b>7522</b>	<b>46.0</b>
Verona Town/City	4569		5595		7511		1026		1916		444	
Windsor Town/Deforest	4326		7179		9502		2853		2323		1272	
Sun Prairie City	9935		12931		15353		2996		2422		427	
Cottage Grove Town /Village	2296		3840		4656		1544		816		904	
Stoughton City	6096		7589		8786		1493		1197		1196	
Oregon Town/Village	3668		5674		6947		2006		1273		1034	
Rest of Periphery	39319		48057		52697		8738		4640		2595	
<b>Periphery Total</b>	<b>70209</b>	<b>24.2</b>	<b>90865</b>	<b>28.1</b>	<b>105452</b>	<b>28.7</b>	<b>20656</b>	<b>45.3</b>	<b>14587</b>	<b>33.5</b>	<b>7872</b>	<b>48.2</b>
<b>Dane County Total</b>	<b>290272</b>	<b>100</b>	<b>323545</b>	<b>100</b>	<b>367085</b>	<b>100</b>	<b>33273</b>	<b>100</b>	<b>43540</b>	<b>100</b>	<b>16335</b>	<b>100</b>

TABLE 1 METROPOLITAN GROWTH 1970 - 1993

One should point out, however, that the state's annual estimates, which are used to determine state shared revenue distributions, are not very accurate. For example, Fitchburg's 1989 population estimate was 14,360 compared to the 1990 Census tally of 15,648 suggesting that over one third of the city's growth occurred in the last year of the 1980 - 1990 decade. A more glaring underestimation occurred in the case of Madison where the 1989 estimate was 10,000 below the Census figure suggesting that half of the city's growth from 1980 to 1990 took place in the last year of the decade.

The fast growth of Dane County since World War II has caused a number of concerns about growth to rise at various points in time. Though many residents, organizations and officials each time expressed their views hoping to reduce the rate of growth and its physical manifestations with the help of planning, zoning and environmental regulations, uncontrolled growth continued and, at some points in time, accelerated. The only measure which has had some impact on development has been the Urban Service Area (USA) concept adopted in 1977 by the Dane County Regional Planning Commission and the Wisconsin Department of Natural Resources. In urban service areas a full range of urban services will

be provided. These include public sanitary sewerage and water supply, solid waste collection, urban drainage, street lighting, neighborhood parks and schools, and a high level of fire and police protection. The concept also attempts to prevent septic tank based subdivisions outside the service area. This requires the concurrence of local units of government and the incorporation of restrictions for septic tank based subdivisions into their ordinances. At this writing all cities and villages in the county have adopted such restrictions but several of the rural towns have not enacted them. Among these is the Town of Oregon south of Fitchburg which in recent years has been one of the fastest growing towns in the county. This "home rule" based concurrence provision weakens the effectiveness of the urban service area concept. Map 2 below shows the current Urban Service Areas in Dane County.



**Map 2 Dane County Urban Service Areas**

At the county level land use issues continue as the central theme of the current debate over growth. While most people agree about the need for "balanced growth", however that generality is perceived, and the need to protect farm land and sensitive environmental areas, how to go about these objectives remains an unresolved issue. It should be pointed out that most aspects of the county growth debate have little or no effect on the development of the Fitchburg Center site which in its entirety is located inside the current Central Urban Service Area boundary. The concerns focus on the current non-urban

parts of the county and such issues as the preservation of prime farm land, scattered development and septic tank based subdivision of land. However, as will be pointed out later, some county wide environmental issues have a direct impact on the site. Therefore, an examination of the regional context is necessary in order to understand where and how the City of Fitchburg and the Fitchburg Center project fit into the broader scope of Dane County and where opportunities and gaps can be found. Analyzing population growth alone does not suffice. Looking at residential, commercial and office development within Dane County and the discussions about them provides important additional insight into the opportunities for the development of Fitchburg Center as well as the constraints the project may encounter. Lastly, attention must be given to community services, schools, transportation and open space issues. All of these are at the core of the growth debate and are vital to the development of this project.

### Residential Development

It might be expected that the distribution of residential development throughout Dane County would reflect population growth. However, according to the Madison Area Builders Association, during the three years from 1990 through 1992 (on the basis of building permits issued) the amount of new housing has increased at an annual rate of close to 2,000 units per year. When one compares this less than 6,000 unit addition to the housing stock with the 16,335 person added to the population, it explains, in part, the current housing market condition in the county. At the current average household size of 2.4 - 2.5 persons, the population increase demands 6,500 to 6,800 additional housing units. The supply is, however, about 1,000 units or 15 percent short of demand. As a consequence vacancy rates are below the accepted norm and construction of new homes is geared towards satisfying high end demand creating a shortage in the supply of low income and so called affordable housing. Despite a growing public and political demand to increase the supply of "affordable housing" very few attempts are currently being made to provide more balance in the booming housing market.

The housing shortage has also caused the value of housing to increase at a rapid pace. For example, the Wisconsin State Journal reported on March 26, 1994, that from February, 1993 to February, 1994, the median sales price for a home in Dane County increased from \$100,250 to \$110,500, or about 10 percent. This compares to a State median price of \$79,410 in 1993 which increased to \$84,725 in 1994 or 6.7 percent. The latest reports suggest that housing price inflation in the Dane County metropolitan area is the sixth highest in the nation.

### Office Development.

Michelson Associates who conduct annual surveys of Madison's metrocore and inner suburbs office vacancy rates reported in their 1994 Office Vacancy Survey that although office construction was

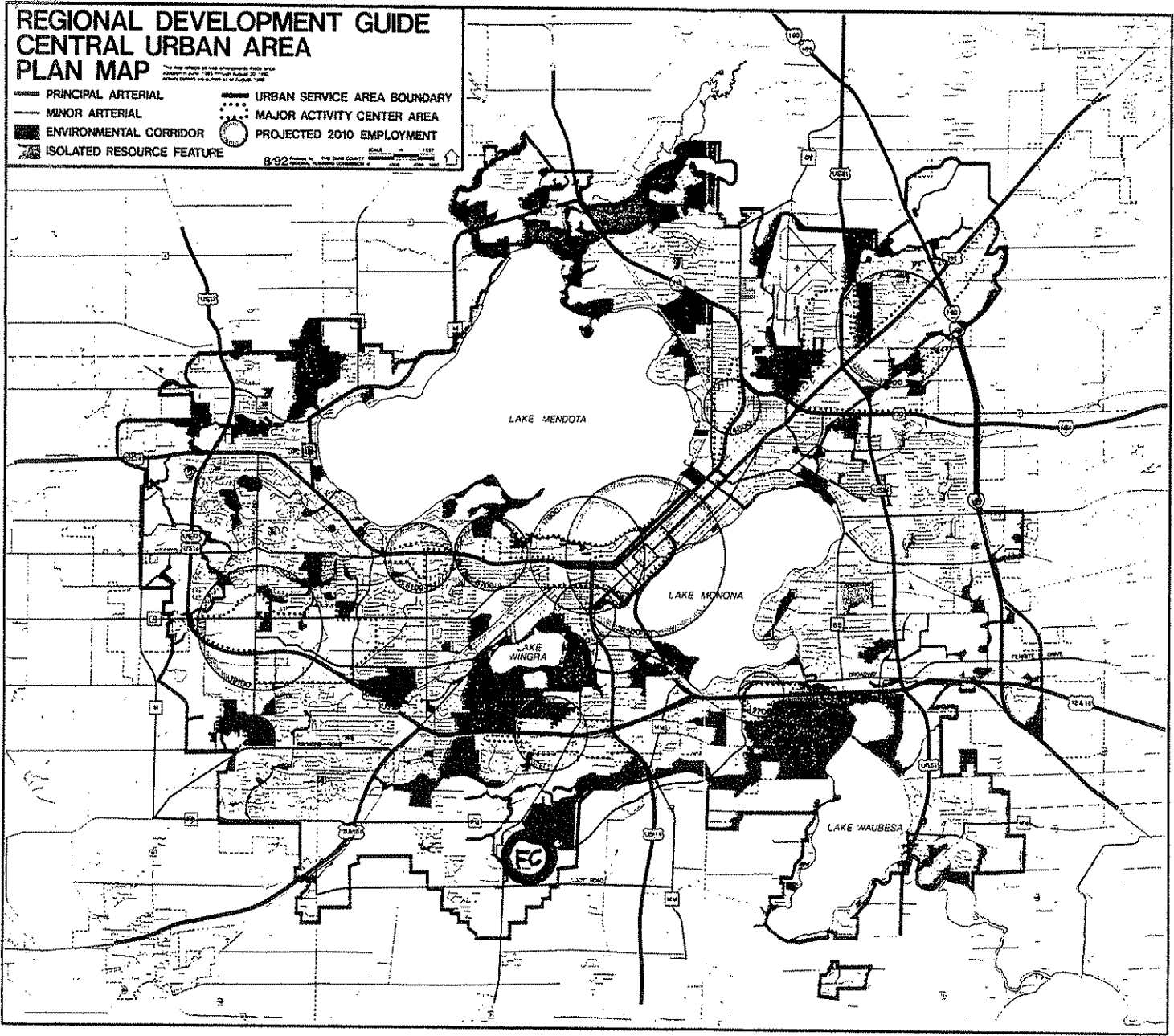
growing in the survey area, there was not enough "Class A" space available - space that rents for \$15.50 or more per square foot. The vacancy rate for this type of office space was for the fifth straight year near zero percent. The overall rate for Class A, B and C space in the survey area was a low 7 percent compared to the national average of 17 percent. Though office building construction has slightly increased in 1994, only a few Class A projects are under construction or in the planning phase. None of them are in Fitchburg. It should be pointed out that the Michelson Survey does not include owner occupied buildings, medical buildings, and office space in buildings with warehousing, manufacturing and assembly space. Thus, for example, the American Family Insurance and State of Wisconsin office buildings are not included in the vacancy calculations.

#### Retail Commercial Development.

According to David N. Taylor's market potential study for retail development at the Fitchburg Center site, conducted for Bill Linton in 1989, Fitchburg residents shop at Fitchburg Ridge, West Towne and South Towne Malls, Hilldale Mall, Westgate Mall, and Nakoma Plaza. Each of these commercial areas caters to a different set of needs. Most of the shopping centers listed above are metropolitan in nature. No new major centers have been constructed since the Taylor study, nor are any currently proposed, discussed or planned. The decline of Madison's downtown as a shopping district is constantly bemoaned, however. As the focus of the Taylor study was to ascertain the shopping habits and buying power of the residents in a 5 mile market area around Fitchburg Center a summary of its findings will be presented in the Local Context section of this report. It should be pointed out that the geographic distribution of population growth and its demographic characteristics combined with the fact that no new commercial centers have been constructed strengthen Taylor's conclusions and recommendations. This view is shared by our current retail development consultant.

#### Regional Plans and Planning.

To conclude this analysis of the regional context of the Fitchburg Center site several regional plans in addition to the aforementioned Urban Service Area plan should be briefly mentioned. Most important of these plans is the Regional Development Guide adopted by the Dane County Regional Planning Commission in 1985 and amended by the Commission through 1992. This plan - Map 3 on the next page - shows principal arterial roads, the county's environmental corridors, major activity center areas, projected 2010 employment centers, and the urban service area boundary. Other regional plans deal with transportation and various aspects of environmental management. The elements of these plans which affect the planning of Fitchburg Center will be discussed in the Local Context section of this report and in conjunction with the detailed analysis of the Fitchburg Center site and the proposed plan.



Map 3 Fitchburg Center Site in the Central Urban Area Plan

In conclusion one should point out that in analyzing Madison metropolitan area data one should be aware of the fact that the statistics are skewed by the very high percentage of students in the general population, currently over 24 percent for the City of Madison and about 12 percent for the county. Specifically, this population segment affects such data as age distribution, household composition, educational attainment levels, occupations, income, employment and unemployment. Housing market analysis and purchasing power studies are easily skewed by this 45,000+ strong student body.

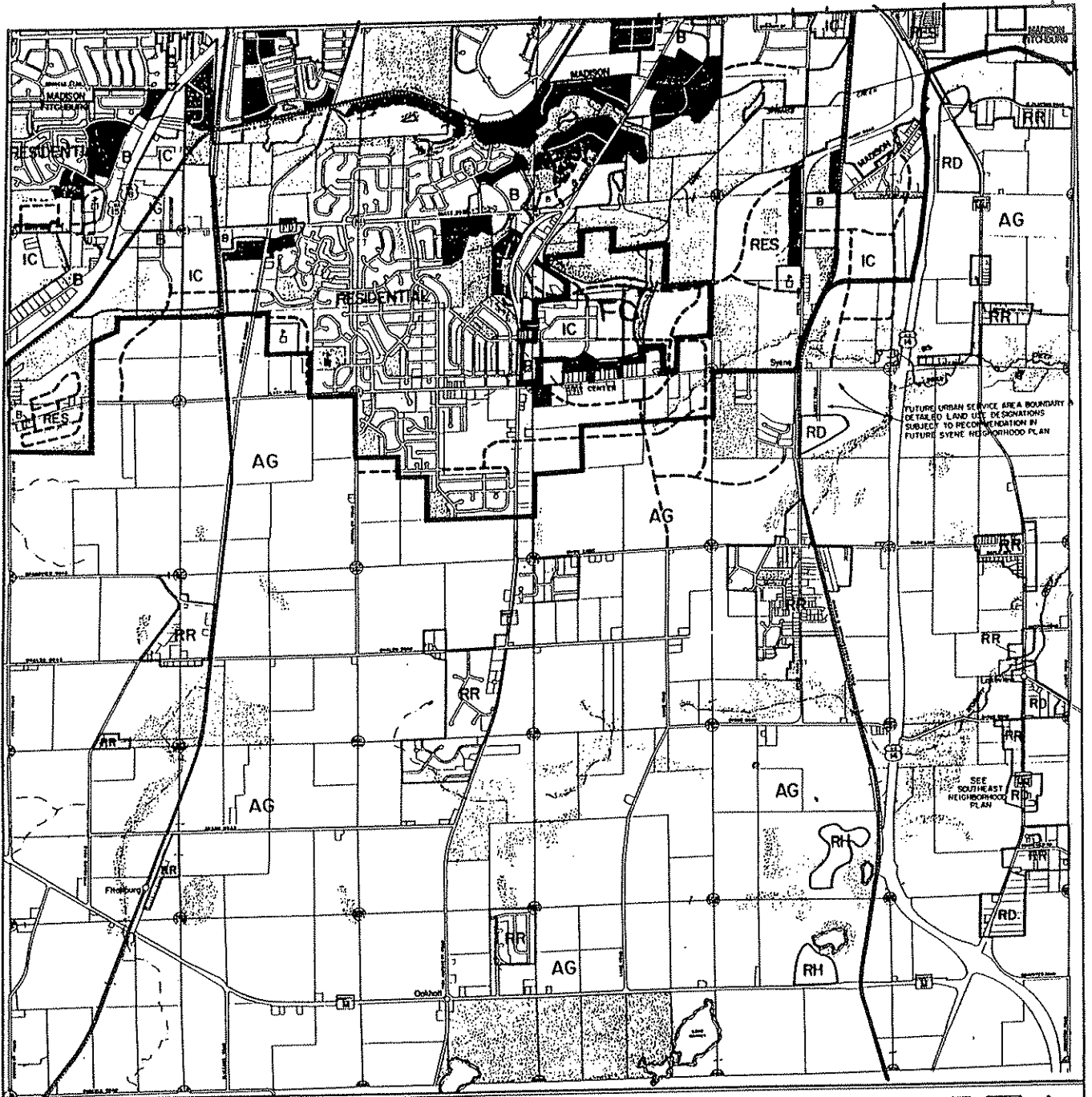
Another very different factor skews information and influences attitudes. That is the manner in which newspapers and other media report statistical information. It is part of the unfortunate praxis in which US society as a whole pays attention to short term information distributed on a daily, weekly, monthly and quarterly basis. A small change in any statistic can lead to unfortunate conclusions and contradictory headlines leaving the reader bewildered about the particular issue. As an example, within less than three weeks, the Wisconsin State Journal and The Capital Times had articles about Madison's housing market with headlines as follows: "No More Boom Town?: Rising prices, interest rates, slow area housing markets" (Capital Times: 4. 7. 1994) and "Existing home sales up: More buyers step forward as mortgage rates increase" (Wisconsin State Journal: 4. 26. 1994).



### 3. THE LOCAL CONTEXT

Fitchburg represents a new type of suburban city. Typically, suburban incorporation has occurred after the surroundings of an old existing village or town center have become densely settled or a community on the urban fringe has felt threatened by annexation. In contrast, the entire predominantly rural Town of Fitchburg decided in the early 1980's to incorporate as a city. After considerable debate and strong opposition the incorporation was accomplished in 1983. Thus a city was created, large in area - six by six miles square - with a northern urbanized and densely settled edge interspersed by several large environmentally sensitive areas, and with the southern two thirds of the incorporated area rural and outside the designated countywide urban service area boundary. It is also a city without a center. In that sense it may be prototypical of knowledge society communities. Currently it is a city for administrative purposes only. Since incorporation the present boundaries of the Urban Service Area have rapidly filled in, and the City is currently proposing to extend the area eastward north of Lacy Road to Highway 14. This would provide balance to the urban third of the city, since at present development is heavily concentrated in the areas to the west of Fish Hatchery Road north of Lacy Road. The eastward extension of the Urban Service Area would provide opportunities for development in the north-eastern section of the city along Syene Road. In turn, this would give Fitchburg Center a truly central location at the southern edge of the urbanized area being situated between the western and eastern development areas, yet being on its edge to also serve the rural portions of the City. Map 4 on the following page depict this attractive location for providing both neighborhood and citywide retail and community services.

Since 1993 the City of Fitchburg has been updating and revising its General Land Use Plan. It was originally adopted in June 1986 and revised in December 1988. Aside from the expansion of the urban service area and one road proposal most of the plan's proposals do not affect the Fitchburg Center project. Therefore, in the following analysis of the local context, the focus is on Fitchburg's demographic growth characteristics and its housing and retail commercial developments and their planning implications.



# FITCHBURG: General Land Use Plan

## PLANNING CLASSIFICATIONS:

- |                                    |                                   |
|------------------------------------|-----------------------------------|
| PARK & OPEN SPACE                  | URBAN SERVICE AREA                |
| MEDIUM DENSITY RESIDENTIAL         | FUTURE STREETS                    |
| HIGH DENSITY RESIDENTIAL 9 u/ac. + | RURAL DEVELOPMENT                 |
| BUSINESS                           | RURAL RESIDENTIAL 2 u/ac. or less |
| INDUSTRIAL - GENERAL               |                                   |
| INDUSTRIAL - COMMERCIAL            |                                   |

Prepared by THE STATE COLLEGE OF VERMONT  
 Planning & Urban Design Department  
 Recommended  
 6/94 Draft

Map 4 The Location of Fitchburg Center

In a background report "Fitchburg Center Project: Analysis of Growth and Housing in Fitchburg", prepared in December, 1993, a detailed analysis of Fitchburg's population and housing characteristics was made. The analysis was based on 1980 and 1990 Census tract data. Though Fitchburg is part of eight census tracts all of which extend beyond the City's boundaries, the Census provides tract data by minor civil divisions so that the city's share of each tract can be obtained. It should also be mentioned that Fitchburg does not have its own school district nor is it part of a single district. As a "unique city" its northern edge is in the Madison school district with the southern part of the City divided between the Verona district to the west and the Oregon district to the east. Any future residents of Fitchburg Center would be in the Madison district.

The background study combined the census tracts into four areas as follows:

**1. The North Central Development Area.**

This area encompasses the Fitchburg portion of Census Tract 14.98. Along Fish Hatchery Road it is dominated by commercial and apartment development much of which is typical of strip development along a highway. To the north of McKee Road, between the road and the Chicago & Northwestern Railroad, are the up-scale Seminole Hills and Seminole Village subdivisions.

**2. The Verona Road Area.**

This area encompasses the Fitchburg portions Census Tracts 5.03, 5.98 and 6. Seminole Highway is the eastern and McKee Road the southern boundary of this NW corner area of the City sometimes referred to as the Jamestown area. The area is characterized by industrial and commercial development along the highways and railroads with mid-scale residential developments bordering on similar development on the Madison side of the city line.

**3. The East and South Border Area.**

The Fitchburg parts of Census Tracts 15.02, 106 and 125 encompass this area. It contains some small scattered subdivisions along County Road MM. Although defined as "urbanized" by the Census the visual characteristics of the area to most observers convey a rural image cluttered by some notions of beginning "urban sprawl".

**4. The South and West Central Area.**

This area contains about 75% of Fitchburg and nearly all of Census Tract 7. It is bound by McKee Road to the north, US Highway 14 to the east, the Village and Town of Oregon to the south, and the Town of Verona to the west. This area too has two distinct environmental characteristics. South of McKee Road developments like Seminole Ridge, Wildwood, Tower Hill Park, and some other subdivisions to the south and along Fish Hatchery Road up to Adam's Road represent typical suburban development and define this third of the South and West Central Area as urbanized. Also, up to Irish Lane this sub-area is within the current Urban Service Area boundary. The remaining U-shaped two thirds of this sub-area in Tract 7 is predominantly rural in its developmental characteristics.

In general, the background report found that Fitchburg's urbanized area is a typical middle-America, white suburban community in which people segregate on the basis of age, family composition, education, occupation and income. Only the northern strip along Fish Hatchery Road is different. It is dominated by rental multifamily housing with a lower income, less educated and young singles population. In stark contrast, the area to the north of McKee Road in the Seminole subdivisions, whilst part of

census tract 14.98, is dominated by a high-income, well-educated and older married population living in expensive homes. Half of Fitchburg's \$300,000 plus homes are located in this area. The Verona Road area and the eastern and southern edges of the city are populated mostly by middle income families.

The central part of the city south of McKee Road and west of Fish Hatchery accounts for one-third of the population and is the most typical suburban area of the city. Half of the city's children, of whom one-third are pre-school age, live in that area. Of the adults, 60% are between 35 and 65 years old and over one-third of them have college degrees and are in managerial or professional occupations. This is reflected in their household incomes with two-thirds of the city's households making over \$50,000 per year. It follows that nearly all of the dwellings are owner occupied and 3-4 bedroom homes. Nearly all homes with a value of \$125,000 or more are in this area. Fitchburg is among the ten communities within the metropolitan area with the least amount of affordable housing. Both the Mayor and the Planning Commission have expressed their concern about this issue.

For the purpose of Fitchburg Center planning the following tables summarize the background study findings. The bold numbers in the tables highlight the low and high end of distribution between the City's four sub-areas.

City & Census Tracts	Age of Population			
	0-18	18-35	35-65	65+
<b>City</b>	<b>3565</b>	<b>6400</b>	<b>5090</b>	<b>593</b>
<b>The North Central Area</b> 14.98	<b>562</b>	<b>2672</b>	<b>768</b>	<b>58</b>
<b>The Verona Road Area</b> 5.03	462	859	663	49
5.98	163	102	237	29
6	396	1099	518	105
<b>Total</b>	<b>1021</b>	<b>2060</b>	<b>1418</b>	<b>183</b>
<b>The South and East Border Area</b> 15.02	32	25	40	16
106	122	114	199	20
125	100	347	290	96
<b>Total</b>	<b>254</b>	<b>486</b>	<b>779</b>	<b>132</b>
<b>The South and West Central Area</b> 107	<b>1728</b>	<b>1182</b>	<b>2310</b>	<b>285</b>

**TABLE 2 AGE DISTRIBUTION BY SUB-AREA**

City & Census Tracts	Occupation					
	M&P	T,S&A	S	F,F&F	P,C&R	O&L
<b>City</b>	<b>3554</b>	<b>3863</b>	<b>1032</b>	<b>176</b>	<b>788</b>	<b>727</b>
<b>The North Central Area</b> 14.98	<b>861</b>	<b>1260</b>	<b>414</b>	<b>45</b>	<b>180</b>	<b>310</b>
<b>The Verona Road Area</b>						
5.03	519	604	128	21	73	152
5.98	145	96	15	25	10	7
6	469	544	183	9	87	120
<b>Total</b>	<b>1133</b>	<b>1244</b>	<b>326</b>	<b>55</b>	<b>170</b>	<b>279</b>
<b>The South and East Border Area</b>						
15.02	27	8	0	10	11	0
106	78	135	24	6	22	7
125	32	76	39	11	48	2
<b>Total</b>	<b>137</b>	<b>219</b>	<b>63</b>	<b>27</b>	<b>81</b>	<b>9</b>
<b>The South and West Central Area</b>						
107	<b>1323</b>	<b>1140</b>	<b>229</b>	<b>49</b>	<b>357</b>	<b>129</b>

Managerial and professional specialties M & P  
 Technical, sales and administrative support T, S & A  
 Services S  
 Farming, forestry and fishing F, F & F  
 Precision production, crafts and repair P, C & R  
 Operators, fabricators and laborers O, F & L

TABLE 3 OCCUPATIONS BY SUB-AREA

City & Census Tracts	Household Incomes			
	<\$20,000	\$20-35,000	\$35-50,000	\$50,000+
<b>City</b>	<b>1287</b>	<b>1869</b>	<b>1538</b>	<b>1750</b>
<b>The North Central Area</b> 14.98	<b>678</b>	<b>691</b>	<b>414</b>	<b>168</b>
<b>The Verona Road Area</b>				
5.03	225	303	238	225
5.98	13	24	75	70
6	200	417	256	118
<b>Total</b>	<b>438</b>	<b>744</b>	<b>569</b>	<b>413</b>
<b>The South and East Border Area</b>				
15.02	8	8	9	8
106	15	44	47	49
125	47	46	62	11
<b>Total</b>	<b>70</b>	<b>98</b>	<b>118</b>	<b>68</b>
<b>The South and West Central Area</b>				
107	<b>101</b>	<b>226</b>	<b>437</b>	<b>1101</b>

TABLE 4 HOUSEHOLD INCOME BY SUB-AREA

Though the preceding tables do not provide a comparison with comparable information for 1980, in regard to household income distribution city wide data were available allowing for a comparison. As Table 5 below shows, the growth from 1980 to 1990 has shifted the income distribution towards the two upper brackets. The housing data for 1990 in Tables 9, 10 and 11 clearly reflect this trend towards higher income households.

	1980		1990	
	#	%	#	%
Households	5035		6444	
Household Income (In 1990 Dollars)				
<\$20,000	1501	29.8	1287	20.0
\$20-35,000	1724	34.2	1869	29.0
\$35-50,000	810	16.1	1538	23.9
>\$50,000	1000	19.8	1750	27.1

TABLE 5 HOUSEHOLD INCOMES 1980 AND 1990

City & Census Tracts	Tenure		Bedrooms			
	Owner	Renter	<1	2	3	4+
<b>City</b>	<b>2496</b>	<b>3903</b>	<b>1531</b>	<b>2401</b>	<b>1919</b>	<b>834</b>
<b>The North Central Area</b>						
14.98	60	1987	837	1106	188	38
<b>The Verona Road Area</b>						
5.03	273	670	365	343	235	67
5.98	130	32	0	10	137	19
6	205	845	243	648	129	62
<b>Total</b>	<b>608</b>	<b>1547</b>	<b>608</b>	<b>1001</b>	<b>501</b>	<b>148</b>
<b>The South and East Border Area</b>						
15.02	18	19	14	0	0	23
106	121	55	29	23	109	15
125	83	80	9	88	43	23
<b>Total</b>	<b>222</b>	<b>154</b>	<b>52</b>	<b>111</b>	<b>152</b>	<b>61</b>
<b>The South and West Central Area</b>						
107	1606	215	32	183	1078	587

TABLE 6 HOUSING TENURE AND SIZE BY SUB-AREA

City & Census Tracts	Estimated Home Value				
	\$75,000	\$75- 125,000	\$125- 175,000	\$175- 300,000	\$300,000 +
	-				
<b>City</b>	<b>422</b>	<b>1219</b>	<b>286</b>	<b>277</b>	<b>33</b>
<b>The North Central Area</b> 14.98					
	27	-	-	9	17
<b>The Verona Road Area</b> 5.03	-	257	11	-	-
5.98	30	85	5	-	-
6	39	129	-	-	-
<b>Total</b>	<b>69</b>	<b>471</b>	<b>16</b>	<b>-</b>	<b>-</b>
<b>The South and East Border Area</b>					
15.02	18	-	-	-	-
106	29	26	8	-	-
125	8	9	-	-	-
<b>Total</b>	<b>55</b>	<b>35</b>	<b>8</b>	<b>-</b>	<b>-</b>
<b>The South and West Central Area</b> 107	<b>244</b>	<b>713</b>	<b>262</b>	<b>268</b>	<b>16</b>

**TABLE 7 ESTIMATED HOME VALUE BY SUB-AREA**

Now, four years after the census was taken, based on the State of Wisconsin population estimates and supported by building permit and subdivision activity data, it is safe to assume that Fitchburg's market share in population growth is currently at least at the 1980-1990 level. For example, building permit activity has increased from an average of 91 single family units per year to an average of 126 units per year since 1990. Subdivision activity has increased in terms of the number of lots in each subdivision. Also the size of the lots has increased, but only slightly on average. A scan of newspaper advertising and real estate agent interviews reveals a "hot" housing market that holds for all of Dane County. What makes Fitchburg stand apart from other areas in Dane County is the type of housing, its cost and its accessibility to the main employment centers of Madison. Thus 3 and 4 bedroom homes in the \$200,000 plus price range dominate the Fitchburg area and have no trouble selling in about 50 days.

Three major new subdivisions are currently planned in the urban service area. The Roark project is on a 210-acre parcel located north of McKee Road in the Seminole Hills area. It is a "traditional" neighborhood of 422 single-family homes, 8 duplexes and two acres of multi-family units. A 10 - 15 acre recreation center is included. While opposition to this development is concerned over its possible environmental effects on the University of Wisconsin Arboretum and the Nine Springs E-Way, Roark

plans to protect the E-Way and to provide park space. The project has been approved by the Planning Commission. The second project is also located to the north of McKee Road with Fish Hatchery Road as its eastern edge. Here the developer is proposing a 270-unit senior housing complex. The third project is another 42 unit senior housing complex to be built by Madison's Independent Living group. With these projects under development, the Fitchburg Center property remains the only undeveloped large parcel in the current Urban Service Area.

New retail and office development in Fitchburg is concentrated in the McKee / Fish Hatchery Road intersection area. In addition to a bank and some small office buildings on the north side of McKee Road, a recreation center is proposed in the Roark development. On the south side of McKee with access from Fish Hatchery Road is Yarmouth Crossing - a four building strip type retail / office complex of about 30,000 square feet of retail and 25,000 square feet of office space. To the west of this project the Michelson site may contain 59,000 square feet of commercial space. In addition plans are being developed for commercial uses, including a major supermarket, on a 60 acre site owned by St. Mary's Hospital. This site is located on the west side of Fish Hatchery Road to the north of McKee Road.

As the geography and demographics of Fitchburg's growth since 1988 has exceeded the pace of new commercial development in the city, the findings and recommendations of the Taylor market potential study conducted in 1989 are still relevant. The difference in the pace of development not only supports but strengthens the findings of that study. Taylor delineated the Fitchburg Center primary trade area as a 10 minute travel time area surrounding the center site as shown on the purchasing power map on the next page. All of Fitchburg and portions of Oregon, Verona, Jamestown, Arbor Hills and South Madison were contained in this field. This trade area was examined using U.S. Census data to ascertain its social, economic and housing characteristics. The following data were used: population growth and household size, family status, age structure, occupations, housing type, tenure, value of house, and year of move to Fitchburg. In addition, competing retail centers and insular establishments in the trade area were examined. The third basic analytic tool was a detailed mail survey of 750 households in the primary trade area stratified by the five study zones shown on the map. The 38 per cent response rate of about 340 returned complete survey instruments was considered very satisfactory and deemed to provide a solid base for any conclusions and recommendations.

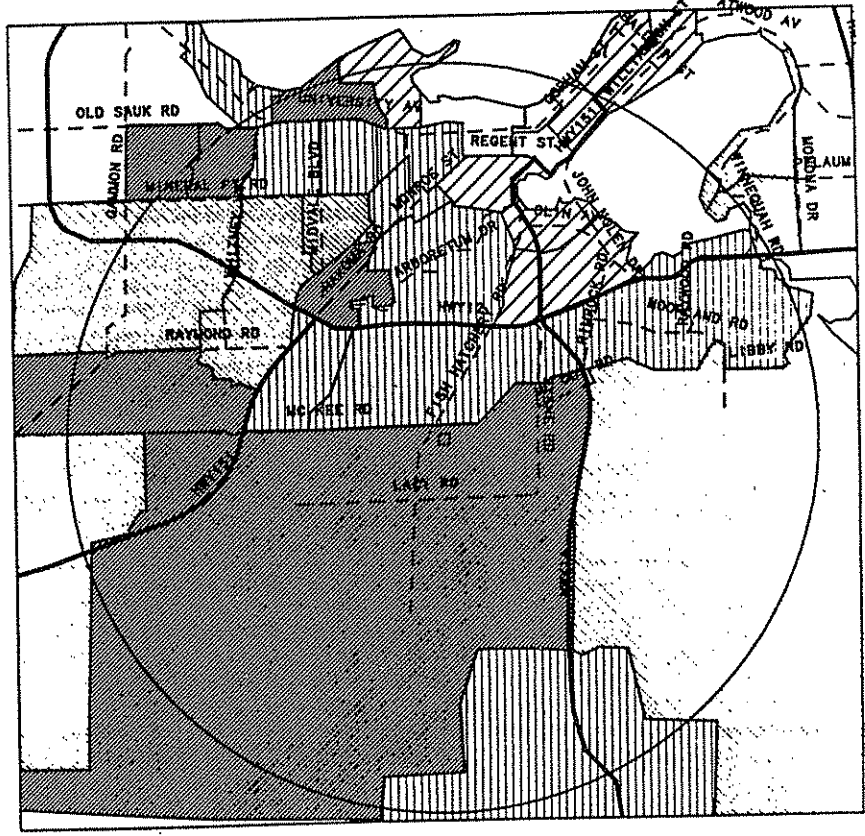
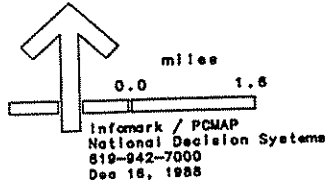
The analysis determined that "there were three major segments of retail demand." The first segment represented the older and more rural population demanding traditional services and lower priced merchandise. The second segment represented a younger and highly mobile group demanding convenience over other retailing aspects, such as quality and price. The third and largest segment, 71 percent of the



1988 HH INCOME  
MEDIAN (EST.)

- \$ 0 - \$10,000
- ▨ \$10,001 - \$20,000
- ▧ \$20,001 - \$33,000
- ▩ \$33,001 - \$40,000
- \$40,001 - \$57,000

— Major Hwys  
 - - Major Roads



FROM TAYLOR MARKET STUDY  
**Map 5 Trade Area Purchasing Power, 1988**

respondents, represents a family-oriented, affluent population demanding high quality, customer service oriented specialty businesses.

The analysis suggested that a staged approach to developing a commercial site would be necessary in order to allow for additions as Fitchburg grows. Several types of retail services should be provided: food, such as a specialty market, a bakery and coffee shop; home related businesses, such as home furnishings and accessories; leisure related businesses, such as sporting goods; entertainment, such as a family-oriented restaurant and a specialty video store; services, such as a dry cleaner, tailor; a medical and dental clinic; and boutiques, such as women's or children's clothing and a quality card and gift shop and florist. Taylor believed that "a good book store would do significant business" and that "a specialty toy store would flourish." Lastly, "a good beauty salon with strong product lines will find a ready home here."

Finally, Taylor concluded that any retail development on the Fitchburg Center site must embody the goals of a "downtown" for the community. It should incorporate elements that would appeal to all three identified market segments. However, it was his belief that any development should not be traditionally

configured. He was opposed to a strip type shopping center. He advocated landscaped parking areas, common green and open spaces and terraces and believed "that a more unique approach to site development will lead to a broader consumer base." Interestingly, the participants at a brainstorming workshop which initiated the Fitchburg Center plan formulation process without access to Taylor's report came up with nearly identical recommendations for the composition and treatment of any retail component in a Fitchburg Center plan.

Currently, there are two areas which are considered industrial parks in Fitchburg. One is the area covered by the Fitchburg Research Park plat and its Tax Incremental District No. 2 overlay. The other is located on Fitchburg's northwest side along Verona Road. In the general plan review a third district is being proposed for an area in the north-east of the city between the Chicago and Northwestern Railroad and US Highway 14. The City of Fitchburg and the Village of Oregon are considering a joint "business park" to be located at Fitchburg's south-east corner and along Oregon's northern edge. The two communities would split the cost of developing the 200-acre site and the potential revenues from the project.

In regard to schools one should mention that the Verona School District is considering the construction of a new school in the east central part of Fitchburg. Aside from the controversial proposal to locate a charter middle school on a site on Gunflint Trail in the Fitchburg Center planning area, the Madison School District has no plans for any new school in their Fitchburg service area despite the new residential developments on the north side of McKee Road. In the Fitchburg General Plan revision a school site is proposed on Syene Road to serve future developments in the north-east quadrant of the city. This school would probably be in the Oregon School District.

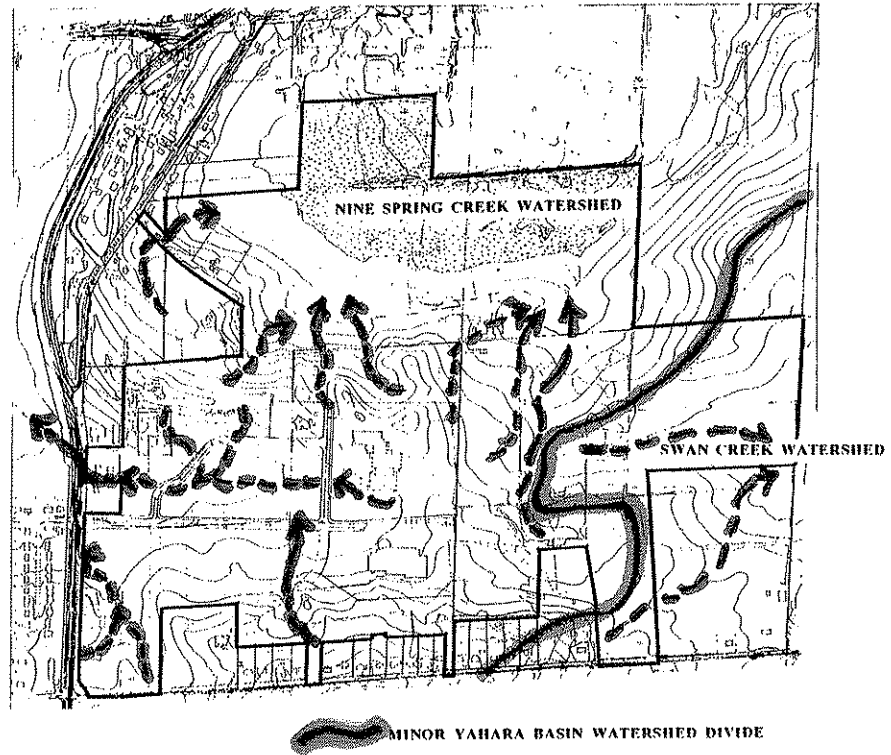
In the following site analysis section some city-wide infrastructure issues, such as roads and sewerage, will be examined and discussed.

#### 4. THE SITE AND ITS CHARACTERISTICS

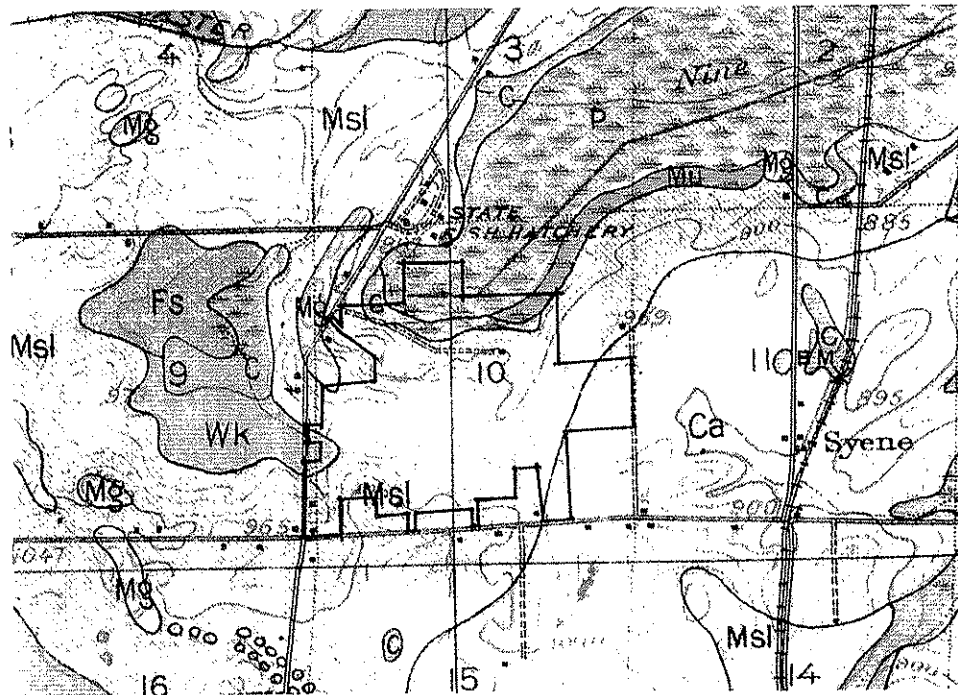
The 380+ acres owned by Fitchburg Research Park Associates and Promega Corporation are located in Section 10, Town 6 North, Range 9 East, City of Fitchburg, Dane County, Wisconsin with a sliver of the acreage in Range 9 along the east side of Fish Hatchery Road. The entire site is in the Yahara Watershed, although a minor divide on the former Blaney property splits the site between the Nine Springs Creek and Swan Creek Watersheds. Gently rolling hills divide the area into three minor drainage sheds with several distinct drainage courses in each shed. The dominant courses are a westbound man-made course with culverts and floodgates through the center of the Fitchburg Research Park plat, a northbound course through the wooded area to the east of the Promega site defined as an "intermittent stream" on the county's environmental corridor map and included in the corridor system, and an eastbound course from the middle of the former Blaney property, with a pond at its beginnings, leading into Swan Creek. Map 6 on the next page shows the boundary of the planning area, the topography of the site, the main drainage courses and the watershed divide.

As seen on the soils map, Map 7 on the same page, nearly all of the site is deep phase Miami silt loam. It is one of the main soils in Dane county and is considered good farmland. Its surface soil has an average depth of 12-14 inches. The subsoil becomes heavier with depth and is often a silty clay loam to a depth of 3 to 6 feet where it is encountered by a mixture of sand, silt, clay and gravel. The soil usually drains well while retaining moisture reducing crop suffering during long dry spells. The underlying rock is limestone. The original forest growth on this deep phase was often less dense than on the typical soil and referred to as "oak openings." Timber consisted of white, red and black oak, hickory, maple, basswood and some elm. All of it was removed and the current wooded areas on the site are second growth unattended woodlots.

Other soils found in the area are the peat deposits of the wetlands covering about 63 acres along the northern boundary of the site. Along the southern edge of the peat deposits is a narrow strip of

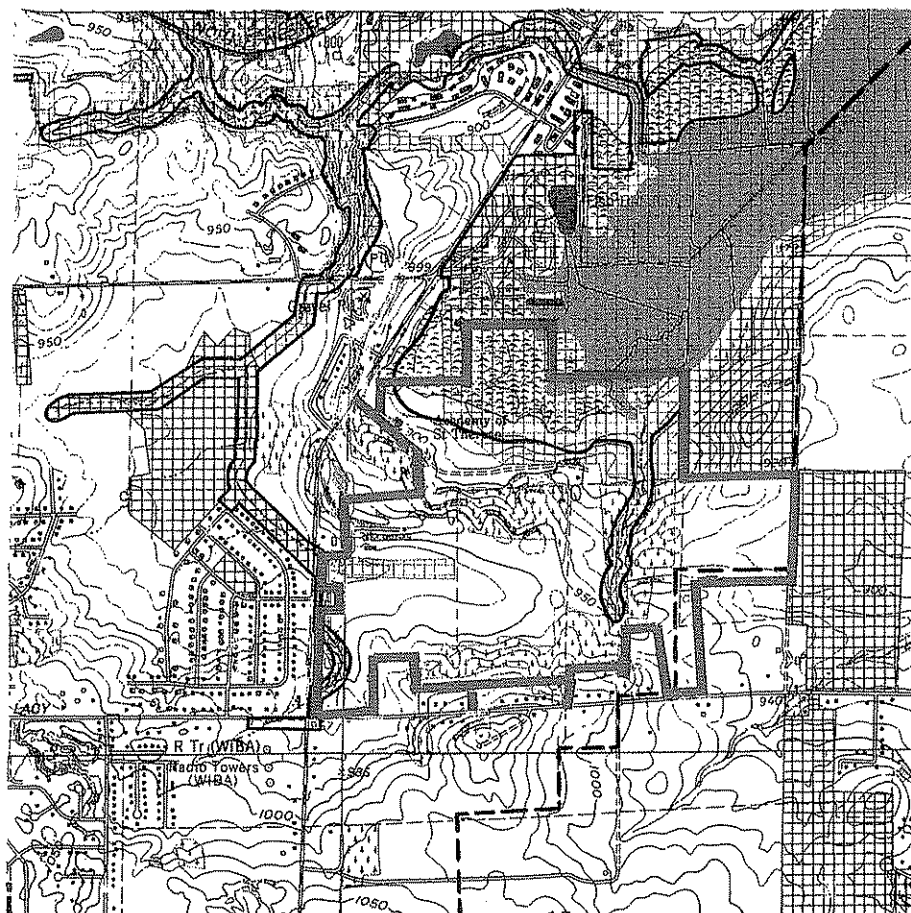



















Map 6 The Site: Topography and Drainage



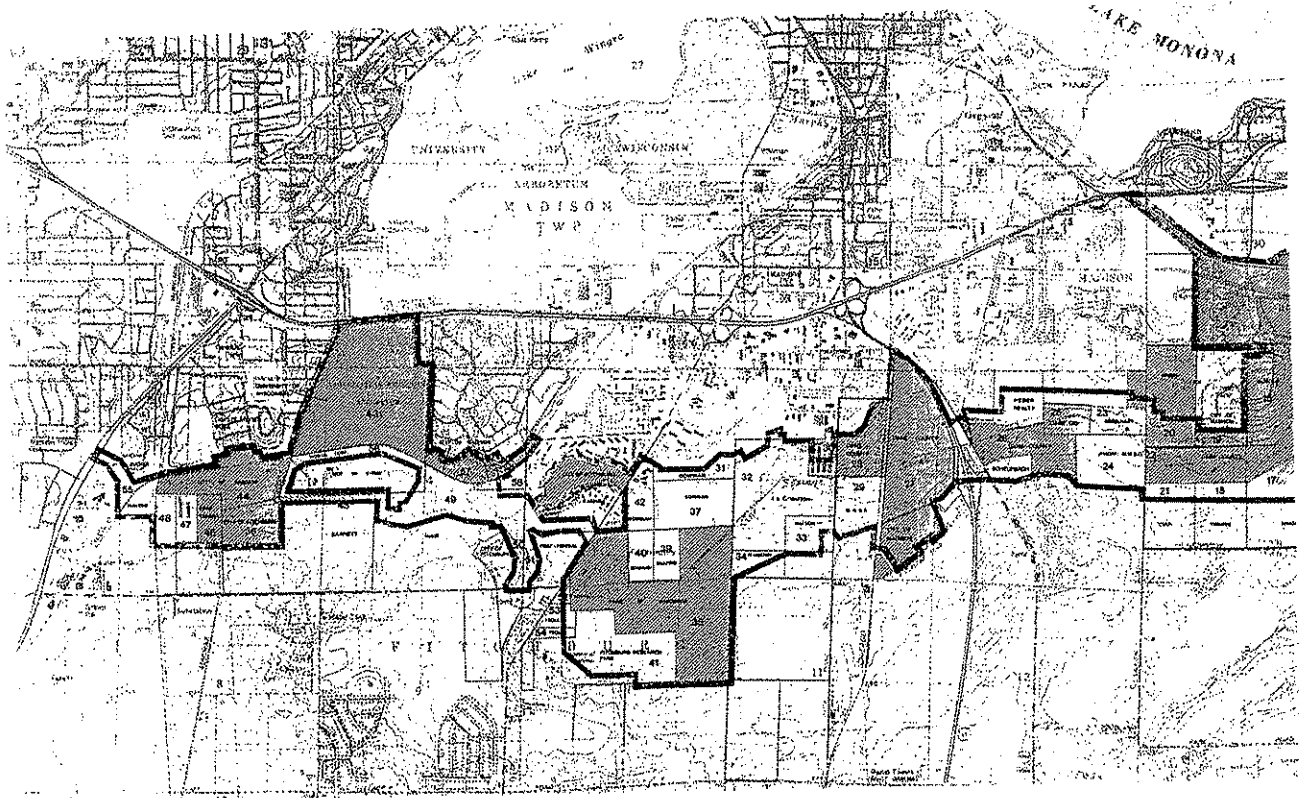
Map 7 The Soils of the Site

and Clyde silt loam. At the eastern end of the site, in the Swan Creek watershed, Carrington silt loam is found. This is one of the most important and highly priced soils in the State. The surface soil has an average depth of 12 to 14 inches, is dark brown to almost black and contains large quantities of organic matter. The subsoil is heavy and usually extends to a depth greater than three feet and ranges from 2 to 8 feet in thickness. The soil section is practically free from gravel stones and boulders and is uniform in structure and texture. Immediately below this silty mantle the typical glacial till, consisting of clay, silt, sand and gravel, is encountered. The depth to underlying rock ranges from 10 to 50 feet. This loam is a typical prairie soil. The native growth consisted almost entirely of prairie grasses, with some oak, maple and hickory near the boundaries of other soil types and along streams.

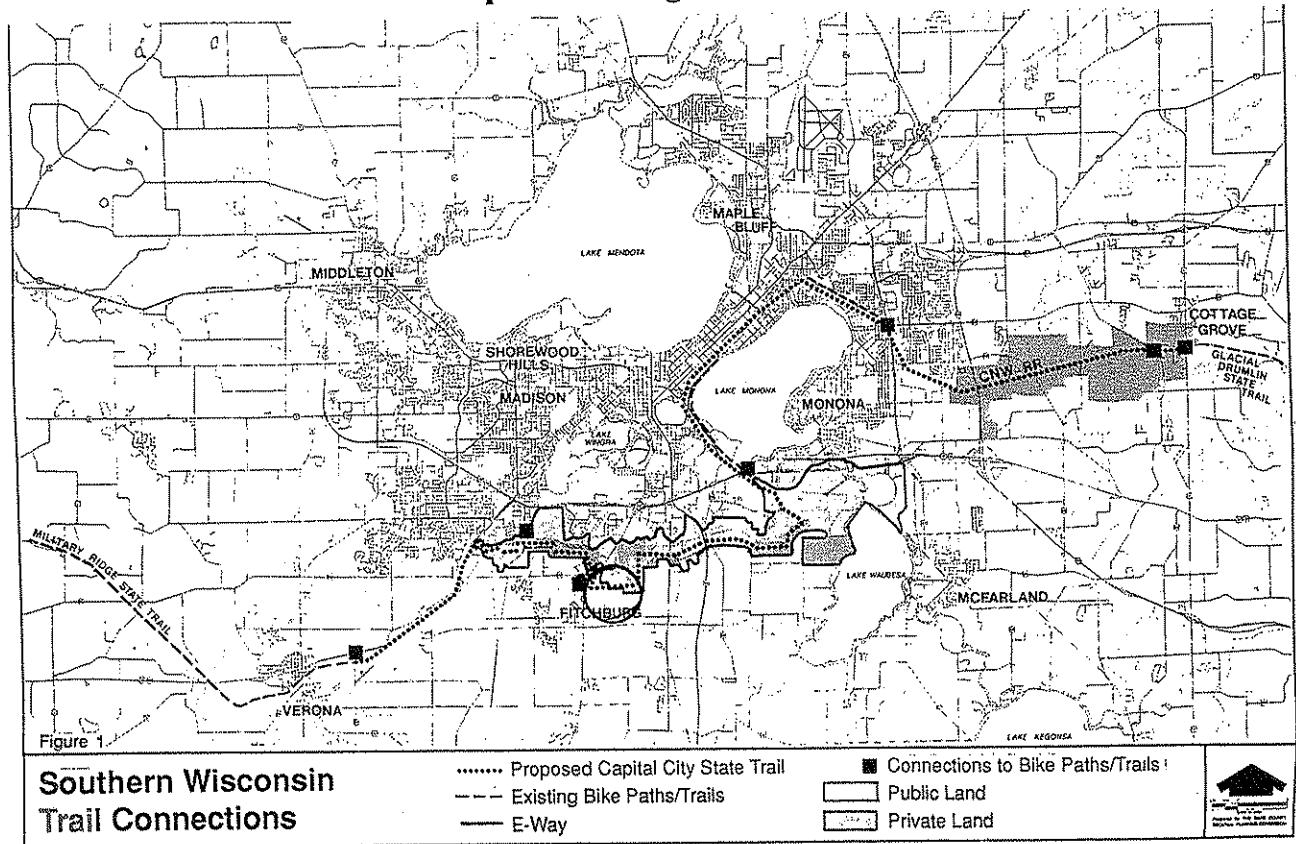


	Environmental Corridors		Perennial Streams
	Urban Service Area		Intermittent Streams
	Isolated Resource Features		Open Channel Drainageways
	Existing Parks, Greenways, Conservancy Lands		Wetlands
	Proposed Parks, Greenways, Conservancy Lands		100-Year Floodplain
	Public Lands, no access		Woodlands
	Lakes (less than 200 acres) and other water bodies		Prairie and other Unique Vegetation
	Lakes (greater than 200 acres)		Steep Slope (greater than 12%)
			Potential Linkages

**Map 8 Fitchburg Center in Relation to Dane County Environmental Corridors**



Map 9 Fitchburg Center in Relation to the Dane County E-Way



Map 10 Fitchburg Center in Relation to Dane County Trails

The northern part of the site is affected by the environmental concerns of the Dane County Regional Planning Commission, the County Parks Commission and various citizen groups. We share their concerns but believe that the location of Fitchburg Center in relation to the Environmental Corridors, the E - Way and the proposed Capitol City State Trail as shown on the preceding Maps 8, 9 and 10 enhances the development opportunities of the site by providing us not only with direct access to these environmental assets but also with the opportunity to participate in the implementation of these social, recreational and visual amenities.

The first fold-out map in the plan display series, Map 11, analyses the site from two perspectives. First the key natural characteristics are mapped. These are as shown on the map legend as

- wetland and flood plain areas;
- drainage courses, springs and ponds;
- woodlands and significant tree lines; and
- such topographic features as steep slopes, ridges with a view and the watershed divide.

All of these considerations are key determinants in the design of the plan which is supposed to meet the owner's ideals and the environmental mandate outlined at the brainstorming workshop at the outset of the plan formulation process.

Second, the man-made intrusions onto the site are shown. Though the three new buildings on the site are excellent in their architectural design and are of high quality, their location was determined by an unimaginative Fitchburg Research Park plat and a conventional road and utility system engineered and constructed according to the plat. Convention, or "nostalgic inertia" which better describes the attitude of doing things the way they always are being done, must have guided the design of the plat. The platted area is now as a large grassy concave rectangle surrounded by wide paved streets. It was labeled "runway" at first observation by some of the brainstorming workshop participants. Unfortunately, once a surveyors chain has etched a line in the ground, it is virtually impossible to erase, particularly when concrete has been poured along its side. Fortunately, the drainage course can be modified. But the entrance to Fitchburg Center, the street around the rectangle, and the access stubs from these streets to the north and east are there and have become a set of design determinants for future development.

## 5. THE INSTITUTIONAL CONSTRAINTS

The second fold-out map, Map 12, documents the quilt work of mostly unrelated but often overlapping and sometimes contradictory legal and advisory constraints on the use and development of the site. In the legal category of these constraints, most of the various zoning districts can be ignored because any new plan adopted for the area would set its own districts and district boundaries. The two environmental overlay districts, the Wetlands Overlay Zone (W) and the Floodplain Overlay Zone shown on the map as the flood hazard area, would not be affected by any new plan because of the environment-conscious mandate of this planning effort. Similarly, the Dane County E-Way and Environmental Corridor concepts, although advisory, should become part of the plan. As stated earlier, they present develop-mental opportunities instead of constraints.

Of the remaining constraints listed in the map legend the boundary of the Tax Incremental District #2 is the most important because it covers nearly all of the prime development area in the SW quarter of Section 10. Specifically, it includes much of the wooded slope north of the Promega and Woods Hollow Day Care Center sites and the ridge and slope behind the Promega guest house and the Earth house. These areas were considered prime sites for residential development during the brainstorming workshop. The TID regulations limit development to industrial and commercial uses only. There are, however, provisions for amending allowed uses in a TID as long as 50% of the district area remains zoned for the district's primary use which in this case is specialized industrial (I-S).

According to the 1985 Project Plan for the TID, the 20 year repayment schedule of the planned infrastructure - \$4,315,000 - was based on an assumption of an annual development increment of \$2,000,000 from 1987 to 1998, resulting in a total equalized value for the TID of \$50 million in the year



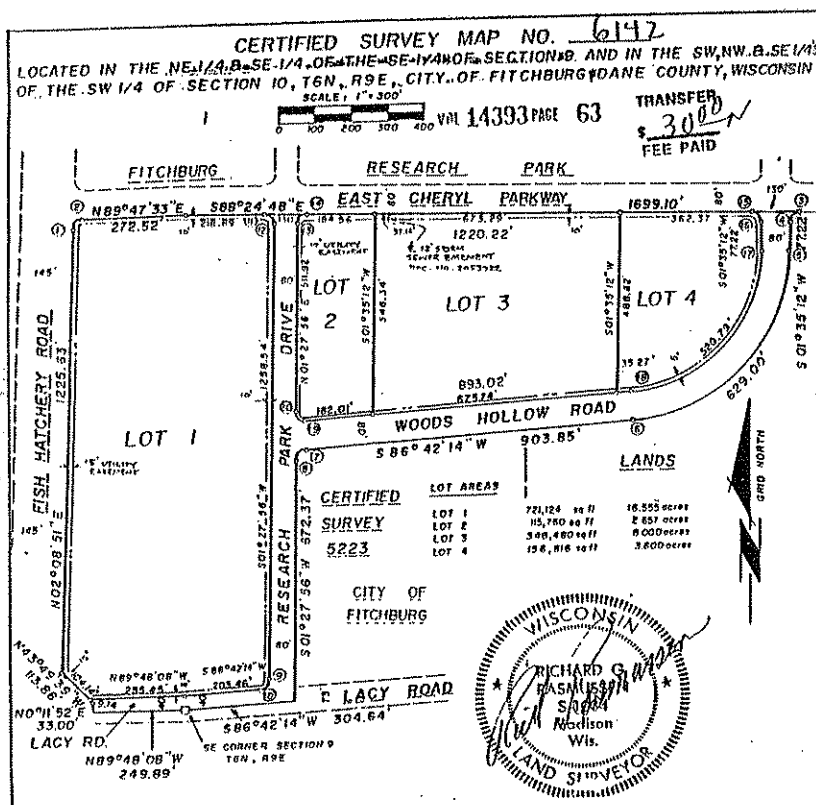
2004. The total recoverable expenditures were much lower than projected totaling only \$3,032,395. On the other hand the TID equalized value on January 1, 1994 was \$29,764,800 as authorized by the state's Department of Revenue. This figure is about \$6 million higher than projected in the TID plan. Without any further additions to the tax base it is now estimated that the TID will be paid off before the year 2000 instead of the year 2006 in the current debt payment schedule. Any new construction coming on the tax roll in 1996 would further accelerate payoff. These financial data suggest that the TIF constraint can be eliminated from any long range planning considerations. It will affect, however, proposals for immediate and intermediate actions up to five years.

A Declaration of Protective Covenants was filed by Bill Linton on behalf of Fitchburg Research Park Associates. It was recorded on July 13, 1987 with the Dane County Register of Deeds. It covered all of the Associates' holdings at that time except the Faraday Center site. The covenants were not extended to the lands in the SE quarter of Section 10 which were acquired from Blaney in 1993. The purpose of the covenants was to assure quality development in the area regardless of who, how, when, and for what purpose any part or parcel was developed. A design review committee approves of all development under the guidelines, standards and specifications established by the covenants. A review of the covenants in light of various development alternatives discussed during the brainstorming workshop suggests that some modifications will be necessary. For example, clustered residential development would not be permitted under the covenants. As the owner has the right to amend or terminate the covenants, they are a positive constraint consistent with the owner's philosophy for the development of the area.

The Dane County and City of Fitchburg road proposals across the northern edge of the site have been in the center of controversy for the last ten years. They originate in the normative notion of the County transportation planners that County Highway PD, McKee Road, ought to be extended eastward to McCoy Road and its intersection with US Highway 14. This would provide for an east-west road through the northern third of Fitchburg. However, the State's fish hatchery and the Nine Spring Creek wetlands basin prevent a simple implementation of this idea for which no current or projected, origin - destination based demand data have been presented. Nevertheless, over the years various loop alignments have been presented, most recently by the City's planning consultant, the Dane County Regional Planning Commission. To avoid conflict with the State's Department of Natural Resources the latest proposals are looking for an alignment of least resistance which means looping the PD extension through private property, including the Fitchburg Center site. As the road proposal is solely based on the assumption that the northeast corner of the City should be linked with the northwest area, and the traffic volume growth data presented to indicate demand are not based on any origin/destination studies, a strong case can be made against any of the proposed east-west road alignments which the Regional

Planning Commission labels as "minor arterial" and the City as "future street". Most important, however, is the fact that based on a detailed topographic analysis the latest alignment shown in the City's proposed General Land Use Plan is technically unsound, environmentally damaging and cost-wise prohibitive. In the Fitchburg Center General Development Plan, a user friendly, cost efficient and environmentally sound alternative is provided. This alternative can be implemented in two stages with the first stage providing immediate relief to the majority of residents on East Lacy Road.

Because of their location the various recorded plats and surveys do not pose critical constraints for planning. Only the unimproved public street right-of-way of a proposed Woods Hollow Road extension from East Cheryl Parkway to the south and west shown on the Certified Survey Map No. 6142, Map 13 below, represents an environmentally unsound alignment and should therefore be vacated.



Map 13 Certified Survey Map 6142

## 6. THE GENERAL DEVELOPMENT PLAN

The Land Use and Infrastructure plan elements shown on the fold-out maps 13 and 14, present a synthesis of the preceding analytical examinations of the various developmental opportunities of the Fitchburg Center site in terms of its regional and local context, its location and its site characteristics. It is suggested that these plan elements in which these opportunities are encapsulated is enhanced and strengthened by several environmental principles in addition to the precepts enumerated in the introduction. Several of these key principles originated in the brainstorming workshop and have since guided the design of the General Development Plan and its components. These guiding principles are:

1. The topography of the site and the natural drainage courses created by the topography should play a central role in plan design.
2. The preservation of all other major natural features, e.g., woodlands and steep slopes, should be emphasized.
3. Proven new technologies and environmentally sound methods in the provision of infrastructure for transportation, communications, energy and heating, in the management of water and waste, and in the design and construction of housing and any other buildings on the site should be considered and applied.
4. The "Radburn concept" of separating pedestrian and automobile movement in residential areas should be applied to minimize automobile use by providing a convenient, attractive and safe pedestrian walkway system through the plan area.
5. Full advantage should be taken of the strategic central location of the site at the southern end of the improved four lane divided Fish Hatchery Road, between Lacy Road and DNR's fish hatchery.
6. Similarly, full advantage should be taken of the unique fact that the site, despite its central location is distinctly separated from its surroundings by broad natural and man-made boundary features. On the west it is separated from Fitchburg's other urbanized areas by Fish Hatchery Road and the high wooded topography along Glacier Valley Road. The fish hatchery and the wetlands area provide a wide buffer to the north. To the east the site abuts the Urban Service Area boundary with this boundary and DNR property preventing any

urban development to the immediate east. Even to the south the topography and the woods create a visual boundary between the plan area and the string of homes along Lacy Road.

The vision of Fitchburg Center is a sub-metropolitan node with a municipal administrative and cultural center, a biotechnology research and office park, a multi-use town center and with residential clusters as components. The nodal concept developed out of a sense that Fitchburg's growth was occurring naturally along Fish Hatchery Road and that the Fitchburg Center area, because of its location, would represent a central node, albeit not a "downtown" for Fitchburg. The plan represents also an additional theme originating in the brainstorming workshop. It is the suggestion to think of any uses in the area with the rule "modestly differentiated and highly integrated."

### **The Land Use Component**

Nine general land use classifications are shown in the plan (Fold-out Map 14):

- (1) Biotechnology research and production,
- (2) Town center uses,
- (3) General offices and laboratories
- (4) Education and conference facilities,
- (5) Residential clusters,
- (6) A Neighborhood Park Site
- (7) A County E-Way reservation,
- (8) Permanent open space, and
- (9) A Development reserve.

In addition, the public and private street right-of-ways and the location of a recreation center is shown.

To provide for flexibility within each of these classifications, the general uses are broken down to describe a list of more specific uses and activities to be allowed under the above non-conventional classification. Thus, under "**town center uses**" one would allow the following: retail stores and customer service establishments, restaurants, professional and other offices, and, to support the small town character of the proposed area, loft-type small apartments on the upper floors of some commercial buildings. Similarly, in the "**education and conference facilities**" zone, guest housing facilities and related services, e.g., a restaurant to serve conference participants would be permitted. The "**general offices**" district is designed to provide sites for offices beyond those serving the immediate Fitchburg community, such as corporate headquarters. Basic research and scientific testing not involving production would also be permitted in this area.

The "**residential clusters**" are envisioned primarily for detached single family residences in clustered arrangements. The units would vary in size, ranging from two bedroom to four bedroom units. No specific units-per-acre densities for any of the clusters are proposed. Instead a ceiling of 750 bedrooms is established for the total number of bedrooms in all residential clusters. The definition of "bedroom" for this purpose is a room with direct access to a bathroom with tub and/or shower not serving more than two bedrooms. Under this definition a study or "media" room with access to a powder room would not be counted as a bedroom. As detailed plans are developed for a cluster the number of bedrooms in that cluster is subtracted from the overall number leaving the remainder as the base for subsequent development. By not setting predetermined densities for any of the clusters, maximum flexibility is provided for the design of each cluster at the appropriate time of its development. For example, in a cluster with topographic constraints, such as steep slopes, townhouses and duplex units may be an environmentally more satisfactory type of housing. The design may result in a higher bedroom count than in a same acreage cluster of detached units and would leave fewer units available for later development. At full development the original bedroom allocation can not be exceeded, however. Thus the proposed 750 bedroom ceiling provides a basis for calculating infrastructure needs, various social service requirements and impact assessments

The "**open spaces**" category consists of greenways, drainage courses, park land, scenic ridges and walkway corridors. It is proposed that wherever possible they be retained in a natural state and be maintained by the management arrangements proposed under the implementation plan. In the E-way Reservation the wetlands are shown as a separate category in order to facilitate negotiations about the maintenance and management of the reservation with two prospective interested parties - the County Park Commission and the State of Wisconsin Department of Natural Resources.

Though all of the above open spaces are ipso facto **community facilities**, the plan shows the proposed location of some specific facilities. These are a recreation center, a neighborhood park with playgrounds and a state trail access point. The recreation center is intended to serve the residents of the proposed housing clusters containing a maximum of 750 bedrooms. Using one person per bedroom occupancy figure the center would serve a population of 750 residents. It would provide meeting and banquet space, possible hobby rooms and indoor recreation space and an outdoor swimming pool and tennis courts. The center would be constructed and managed by the master condominium association. The association would also develop allotment gardens in the greenway along the E-way, allocate plots to the residents and supervise their use.

Approximately 82 acres of the eastern part of the planning area are left without a use designation. It is recommended that the site be held as a "**development reserve**" area under the City's current

agricultural-transitional A-T zoning provisions. As the area is in the Swan Creek watershed it can not be gravity sewerred into the Nine Springs interceptor Therefore development will have to wait for sewer development along the Syene Road corridor. Also, before committing this area for any kind of development it would be advisable to include the remaining 40 acres of the Blaney property into the planning area. In addition, one should wait until a better picture emerges of proposed developments in the northeastern quadrant of the City north of Lacy Road and west of US 14 than that currently provided in the City's General Land Use Plan.

The approximate acreage breakdown and development potential of the proposed land uses in the Fitchburg Center plan area are:

USE CATEGORY	ACREAGE	DEVELOPMENT POTENTIAL (SQ. FT.)	CURRENTLY BUILT (SQ. FT.)
BIOTECHNOLOGY RESEARCH AND PRODUCTION	46	800,000	250,000
TOWN CENTER USES	16	280,000	-
GENERAL OFFICES	16	280,000	35,000
EDUCATION AND CONFERENCE FACILITIES	13	225,000	23,000
RESIDENTIAL CLUSTERS	53	500,000	-
COUNTY E-WAY RESERVATION	81	-	-
CITY NEIGHBORHOOD PARK	12	-	-
OPEN SPACE	47	-	-
PUBLIC RIGHT-OF-WAY	23	-	-
PRIVATE STREET	6	-	-
DEVELOPMENT RESERVE	69	-	-
<b>GENERAL DEVELOPMENT PLAN TOTAL</b>	<b>382</b>	<b>2,085,000</b>	<b>308,000</b>

**TABLE 8 LAND USE ACREAGE AND DEVELOPMENT POTENTIAL**

As nearly all of the proposed uses except the residential clusters on the former Blaney property and the various open space categories from 6 to 11 in the above listing are subject to the Protective Covenants, the above calculation could be made of the amount of building space that is permitted in each use category. The covenants establish a 20 percent ceiling for the foot print size of a building in relation to its site, and set the maximum number of stories at two. Penthouses for utilities and basements are permitted. Because of mixed uses and design considerations the Covenants will be modified in the Town Center. The 20 percent coverage applies to first floor retail only. The second story office and retail space is reduced to half of first floor space and a residential third floor above the offices is added. This results in the same allowed total floor area as in the other use districts. The residential floor area is based on the 750 bedroom rule discussed earlier. The above gross floor area figures provide a basis for assessing the scale and the various impacts of this development .

Despite its central strategic location the before mentioned distinct visual and physical boundaries of the site should provide for easy acceptance of an unconventional plan. The proposed development of Fitchburg Center will not have to relate in visual and physical design terms to development in the surrounding areas. This "isolation" enhances the opportunities for the application of new, non-conventional approaches to the development of the area because physical distance and visual separation mitigate neighboring property owners "value reduction" arguments usually evoked in opposing change. Similarly, the topography of the area presents unique opportunities. The woods, ridges and drainage courses create natural boundaries to delineate between different land uses, between residential clusters and between pedestrian and vehicular movement.

### **The Infrastructure Component**

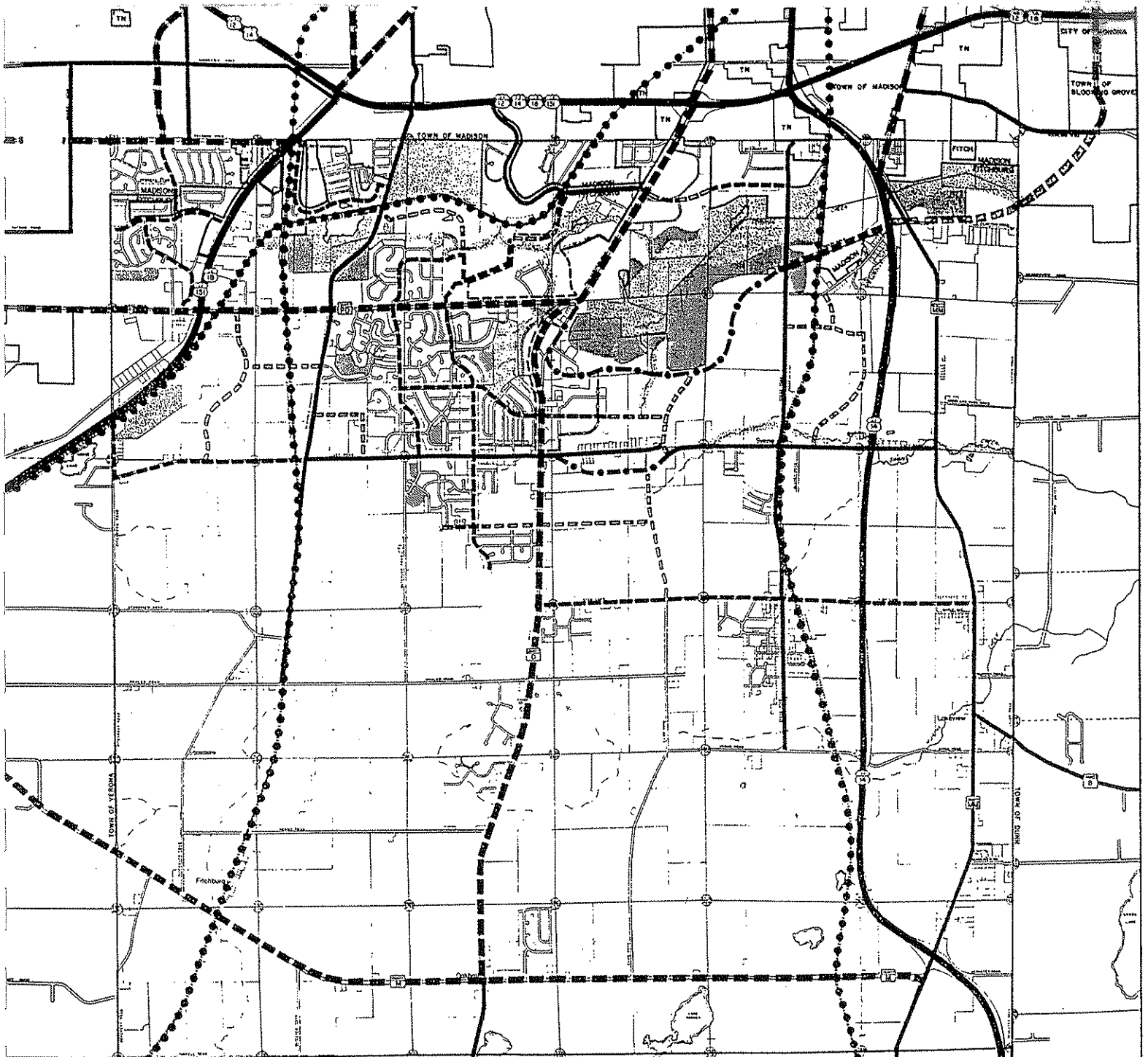
As mandated by the brainstorming workshop the central theme of the infrastructure system is drainage. Four elements of this theme have been given special attention:

- (1) preservation and rehabilitation of existing drainage courses;
- (2) redesign of the east-west drainage course in the center of the FRP plat;
- (3) urban and storm water run-off control to the north and east; and
- (4) controls for ground water protection.

Other elements of the infrastructure plan include public and private roads, parking, bicycle paths, walk-and skiways, a proposed bus loop, and utility easements. Most of these are physically linked, usually to the road system. They will be discussed in the order of the plan map legend (Fold-out Map 15).

In regard to **public roads** serving the area, the extension of East Cheryl Parkway to the east and north-east across the development reserve with a connecting branch to Lacy Road is the only major proposal. This extension provides for a future link from the Town and City Center areas to McCoy Road through the Nine Springs neighborhood and to the east to the Syene neighborhood as shown on Map 16 (following page). This proposal is an environmentally sounder and less costly alternative to the various convoluted proposals made to provide for a link between McKee - McCoy Roads. It also eliminates the engineering problems which all of the proposed northern alignments present, in particular the latest one shown on Map 16.

In regard to timing it should be noted that an extension of Cheryl with a link to Lacy would be required as soon as the Fitchburg Town Center development begins. This would provide a low cost bypass and early relief to the densely built up section of Lacy Road. This is of particular importance because none of the other bypass alternatives is currently being considered for funding let alone construction. The lines on the city's General Plan Map are "long range" propositions with extremely low probability for implementation.



# FITCHBURG Transportation Plan

Existing Proposed

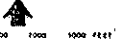
- Principal Arterial
- Minor Arterial
- Major Collector
- Minor Collector

Existing Proposed

- Rail Corridor
- Bicycle Lane/Trail
- Parkway
- Transit Route

REFER TO BICYCLE TRAIL SYSTEM MAP

7/94

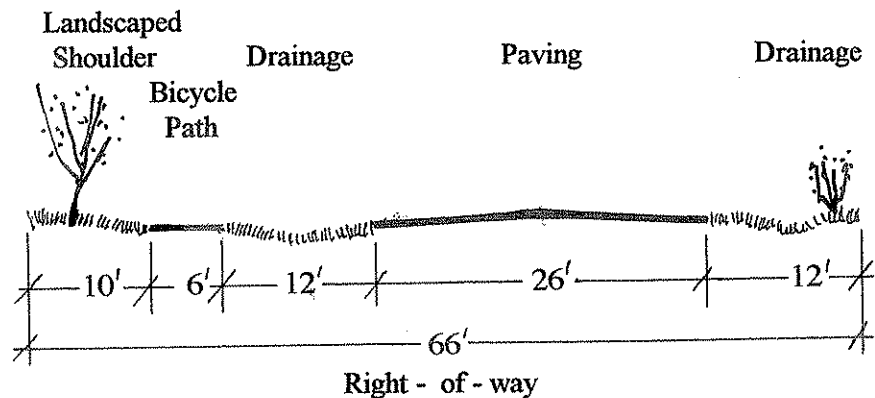


Map 16 East Cheryl Parkway in Fitchburg's Transportation Plan



Two other public streets are proposed. Research Park Drive is extended to the south to Lacy Road in accordance with Certified Survey Map #6142, recorded on November 30, 1989, and Woods Hollow Road is extended north to Gunflint Drive and Glacier Road. It is proposed that on this extension the right-of-way of Woods Hollow Road be reduced from 80 to 66 feet not only to correspond with the width of the Gunflint Trail right-of-way from Glacier Road to the Lokken property driveway as shown on Certified Survey Map #3021, recorded on October 31, 1978, but also to reduce the environmental impact of this road on the steep slopes it traverses. Along both of these streets the improvements would include a six-foot wide paved two way bicycle path. The right-of-ways would provide for any utility easements required along these stretches of road.

Two categories of **private streets** are proposed. The collector road circling the residential clusters to the east and north performs four functions. First, it is the access road to five of the eight proposed residential clusters. Second, it provides the easement for all utility services to these five clusters at designated service access points. Third, and most importantly, it acts as the collector and distributor of all surface runoff from the residential areas it serves. Lastly, it serves as a slow speed scenic drive providing access to and views of the environmental corridor to the east and the wetlands of E-way to the north. In analyzing these functions in the context of topography, ecology, drainage, and environmental management objectives it became evident that the objectives could be best met by keeping the road as a private street to be maintained and serviced by a master condominium association as proposed in the implementation section of this report. Among the benefits of keeping the street private are that the right-of-way can be held to a width of 66 feet and that the street can be designed and built to scenic park road standards with 3 - 4 parking bays at environmentally appropriate points to be selected when the road is designed for construction. The proposed street cross-section is shown in Figure 1 below. The walkway shown on the map on the east and north side of the collector is not in the right-of-way. It is part of the walk- and skiway system and will be designed and built to the standards and specification of that system.



**Figure 1 The Collector Road Cross-section**

The second category consists of the internal service roads in each residential cluster. They will be loops or short dead-end streets with back-up design for turn around. A cross section of these service roads is shown in the Environmental Objectives section of this report. Guest parking bays and a security fenced storage area for recreational vehicles, boats and trailers will be provided. The main entry to each cluster will be at the **service access points** shown on the plan. As mentioned, all utility services will enter each cluster at these points. This includes water, sewer, gas, electricity, and, a fiber optic cable for telephone, cable, multimedia and information service.

No **parking** is shown on the Infrastructure Plan, nor are uniform parking requirements established. It is proposed that the number of parking spaces be determined as part of building design and related to the users needs. As most buildings will be owner occupied or occupied under long term lease arrangements with Fitchburg Center Corporation, user specific parking requirements can be established for each building and related to the environmental characteristics of the site. To reduce the impact on runoff and visual appearance of underutilized paved parking areas during off-peak demand hours the concept of **shared parking** will also be used where applicable. The latest Urban Land Institute and National Parking Association data and recommendations will be used in the application of these performance based principles. In the housing clusters all dwelling units will have a two car garage. In addition, one off-street guest parking space per dwelling unit will be provided. Also each cluster will have a fenced area for the parking and storage of recreational vehicles, boats and trailers.

A one way, two loop **bus route** with the recommended location of **bus stops** is shown on the plan. The route enters from the west East Cheryl Parkway, circles the town center, continues south on Research Park Drive to Lacy Road, west on Lacy to Fish Hatchery Road and then north on Fish Hatchery to the point of entry. From here it could continue north or turn west for a return to McKee Road along the entry route. The proposed stops relate to the proposed land uses and estimated development potentials.

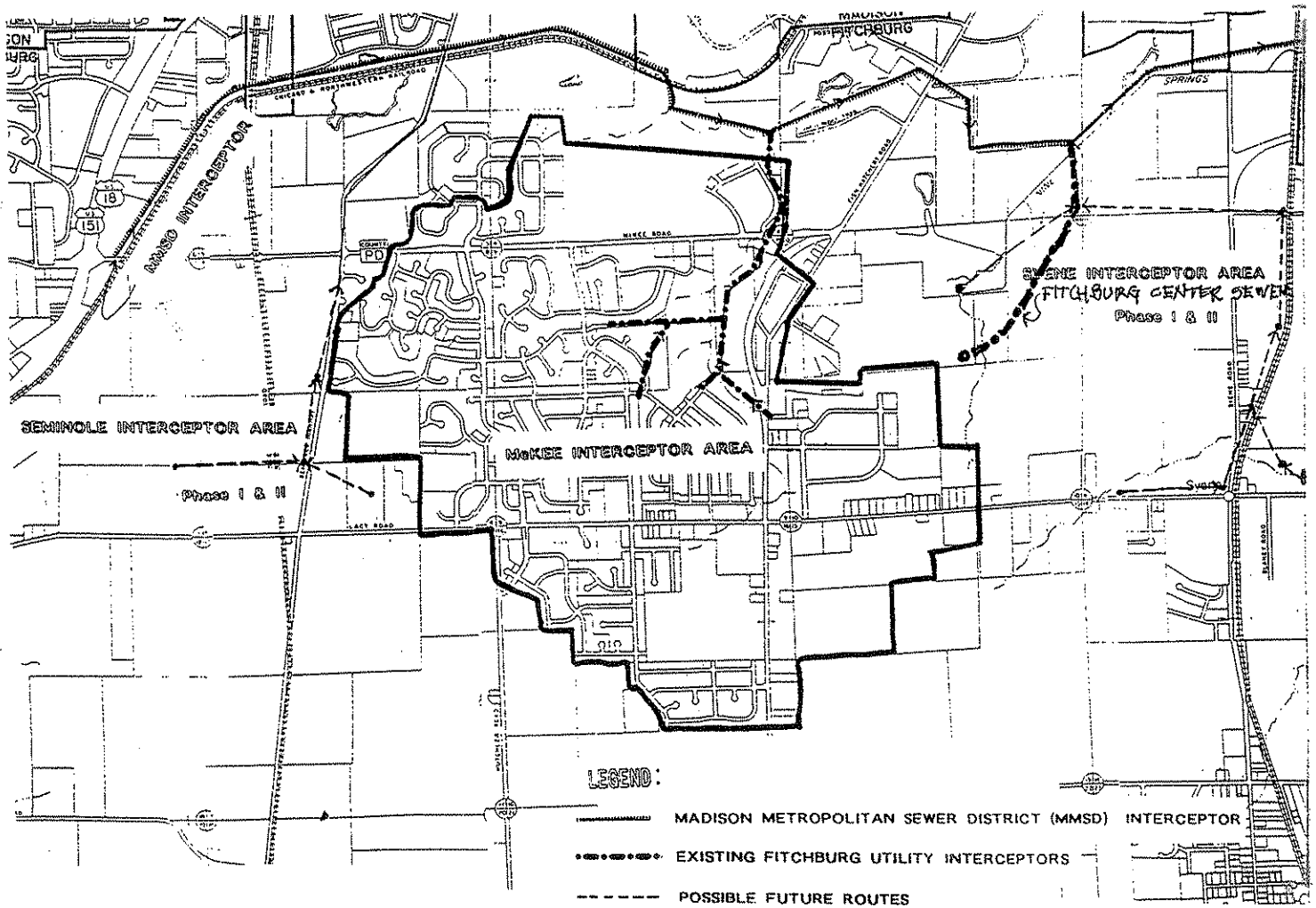
The Infrastructure Plan separates the **bicycle paths** from the walk- and skiway system. In addition to the incompatibility of walkers and bikers sharing the same path, the topography of the site makes a combination of these paths impossible because of many steep slopes. Also the Radburn concept as it is interpreted in this plan sees a separation of the two systems as logical and environmentally sound. The bicycle path system is therefore linked to the paved road system along the private collector street and the public streets. It provides for easy grades and separate paved lanes of a minimum width of 6 feet. Inside the residential clusters bicycles will share the service roadway with automobiles.

The **walk- and skiway system** follows the environmental corridors, the drainage courses, and the scenic ridges and is closely following the contours of the topography. These ways are 4-6 feet wide, at

some points possibly narrower, and will have a compacted surface to provide for all-weather use. In the winter after sufficient snowfall some of them will be groomed as ski paths for cross country skiing. It is proposed that they be lighted and monitored for safety. The proposed general rules for siting and designing houses in the residential clusters which are discussed later are linked to this dual orientation concept by suggesting that the roadside of a house is the wheel oriented side while the opposite nature oriented side is the pedestrian side which has direct access to the walkway system. Separately the proposed Capital City State Trail is shown along the edge of the wetlands in the E-way reservation. An access point to this trail is shown near the intersection of Gunflint Trail and Glacier Road. At this access point some parking and other services could be provided to users of the trail.

Three special **utility easements** not located in the public and private street right-of-ways are shown on the plan. First an easement is shown along the drainage course from the residential cluster site south of Lacy Road. This easement provides access from the housing cluster to all existing services on East Cheryl Parkway. The second easement is the storm sewer easement from the west end of the Town Center area to Fish Hatchery Road. The third easement is of great importance for the development of the areas currently not served by sanitary sewer and not accessible by gravity to the current sewer termini at the north end of Woods Hollow Road and the east end of East Cheryl Parkway. This is the easement beginning at the southeast bend of the collector road at the location of a possible sanitary lift station cutting northeast through Department of Natural Resources property to the proposed Syene Interceptor system and its access point to the Metropolitan Sewer Districts 54" interceptor as shown on Map 17 on the next page. Construction of the approximately 5,000 foot sewer line would eliminate the need for a lift station with a 2,000 foot long reverse pressure line to the East Cheryl Parkway sewer. The capital costs for the sewer and the lift station alternatives are about the same. However, in the sewer alternative there would be no operating and only minor maintenance costs tilting the calculus in favor of sewer construction. In addition, the sewer alternative is superior in terms of minimal environmental hazards.

The **drainage and stormwater management** system is the centerpiece of the infrastructure plan and the dominant factor in overall plan design. In regard to the conventional engineering applied to the east-west drainage course of the original Fitchburg Research Park plat, it is recommended that because this drainage basin can not be restored to its original natural state, the drainage course be given a truly man made urban character. This can be achieved by dividing the system into two branches. One will be part of the Town Center Agora structure collecting the rainwater from the large roof surfaces of the Agora into an underground holding tank from which the water is pumped into the pond and canal water feature along the pedestrian mall of the Agora's design concept. The water feature will be very shallow with a



**Map 17 The Syene Interceptor Area**

decorative floor of natural stones. This allows the water level to fluctuate and provides for an aesthetic experience even during dry periods. The second branch consists of a series of narrow elongated ponds along the southern edge of the Town Center site providing for a landscaped buffer between East Cheryl Parkway and the Town Center parking areas as shown on the Infrastructure Plan and the Agora site plan sketch on page 45.

The drainage to the north from the residential and educational areas will be designed and developed as a "wet system" maintaining the existing drainage courses and providing various size landscaped wetland retention ponds. Specifically, it is proposed that the "intermittent stream" running along the east side of the planned area be developed into a stream with a permanent flow of water. The plan suggests a series

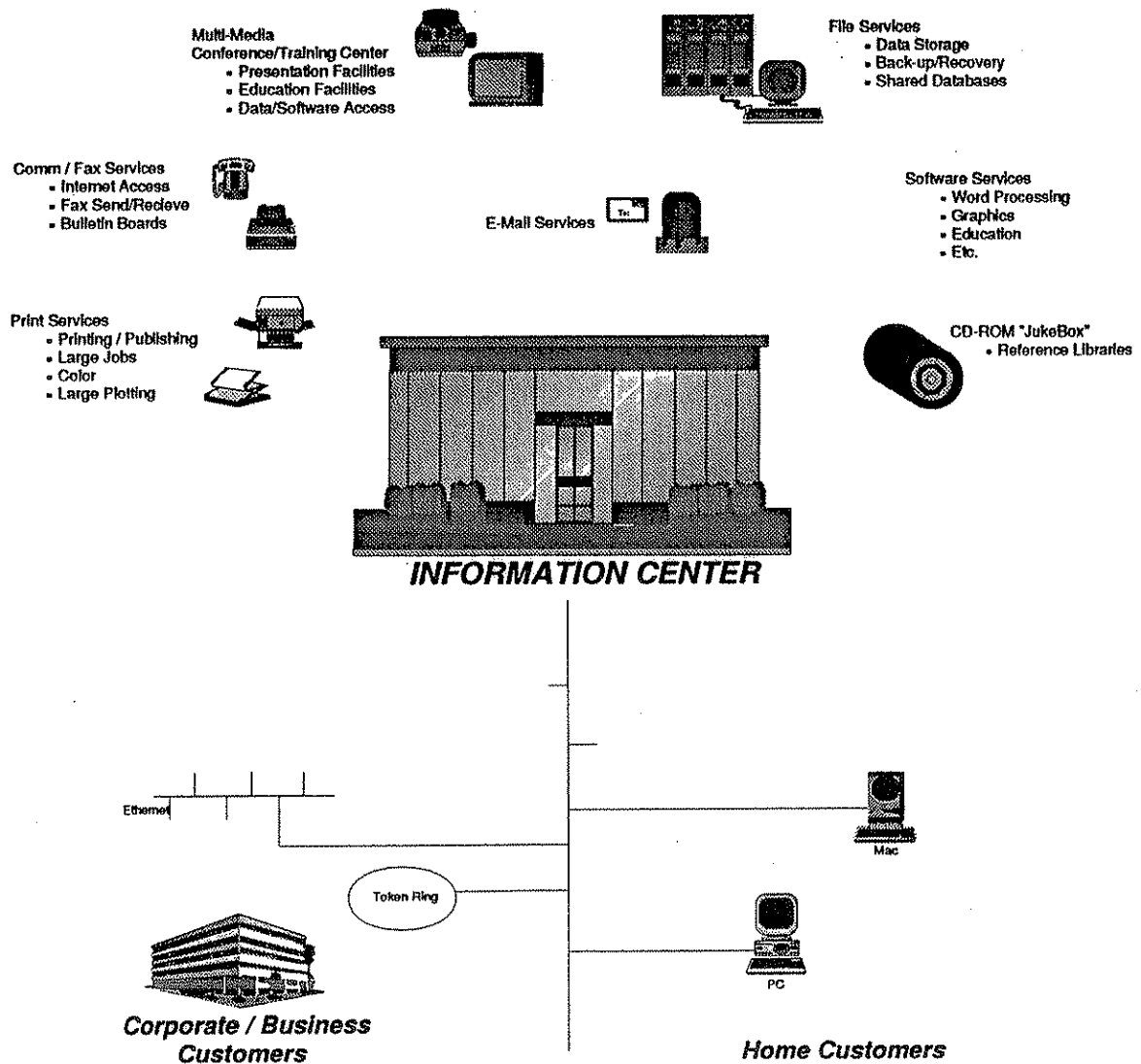
of small dams to for water retention. The ponds could also be used for urban runoff containment and biological water quality control before the water reaches the large storm water detention pond at the edge of the E-way.

Not shown on the map is the latest component of infrastructure - a fiber optic network that links all new buildings in the Fitchburg Center planning area and provides for the flow of data, pictures and sound. This makes Fitchburg Center an **Advanced Telecommunications and Information Technology Center**. The concept is based on the developer's belief that any urban development which is intended to serve its occupants and residents in the 21st century must incorporate as part of its infrastructure the facilities, networks and services which allow full and immediate access to the leading edge of interactive voice, video and data transmission.

Several programs along these lines are currently being planned. For example, the August 1994 issue of Land Use Digest, the monthly newsletter of the Urban Land Institute, reports under the heading "New Town Will Be Linked to Information Highway" that the Village of Montgomery, a new town 50 miles north of Toronto, is being zoned, built, designed, and marketed for home business. The 700-unit, 250-acre community will link businesses, shops and the school with fiber-optic cable, home buyers will have the option of having their homes wired as well, giving them access for voice, video and data transmission. IBM Canada Ltd. is helping the school with hardware and networking software and with a CD-ROM library that will be available to all residents. The developer says that "Montgomery joins an international trend towards community designs that differ fundamentally from conventional suburban developments." This project was also described in the real estate feature article of the February 12, 1995 issue of the New York Times.

The Fitchburg Center Telecommunications and Information Services Plan will take advantage of experience gained so far by community wide networking projects and by the fact that the three main Promega buildings on the site are already linked by fiber optic cable and that certain hardware also is available at BTCL. It is therefore believed that a fully integrated interactive system as shown in the diagram on the next page can be designed and made operational on a step-by-step basis with each new project to be built in Fitchburg Center. The open architecture of the system allows the addition of new applications, services and technologies as they emerge and the deletion of those rendered obsolete by fast moving technology. A brief description of the benefits of the proposed system to businesses and homes follows.

It is proposed that all homes in each cluster will be wired for complete advanced telecommunications and multimedia service as part of construction. However, each occupant will have several options for



**Figure 2 The Telecommunications and Information Center Concept**

service ranging from a no service option under which conventional phone and cable service is subscribed by the occupant from the local service providers, to a full advanced service option provided by Fitchburg Center Corporation. This full service option would include in addition to advanced telephone service with voice mail and other features, cellular phone service, PC and Mac access to a cluster bulletin board linking the homes in the primary housing cluster of each residential condominium, to a neighborhood bulletin board linking all homes in Fitchburg Center, and to Internet. In addition E-mail and Fax service would be provided. Home customers would also have access to up-to-date software and CD-ROM libraries. The Information Center would also provide printing and plotting services, and file services for home customers with unusually large data files. Finally, the video component of home customer service would provide for interactive video, movies on demand, home shopping and access to other visual services as they are developed in this rapidly expanding area.

Corporate customers could naturally access all of the services provided for home customers. Their particular interests would probably focus on the conference and training opportunities and technical services provided by the Center. The availability of these services should make it attractive, in particular for small, new businesses, to locate at the Center.

For its customers the proposed system would provide important cost saving features. First, it would reduce hardware costs for both business and home customers. In particular home customers could access all of the services with relatively low end personal computers and video equipment. Under exploration is the idea of providing home customers with a subscription or leasing option for a basic multimedia system which automatically upgrades any hardware component whenever a significant change in the technology and performance of that component occurs. Under this arrangement the basic system in each home is always compatible with the rapid advances taking place in telecommunications and interactive multimedia. The proposed system would also provide savings to its customers in the area of software by giving access and downloading permits to a continuously up-to-date software library and its technical services. This eliminates the need for system customers to acquire upgrades.

The plan for the Fitchburg Center telecommunications and interactive multimedia system contains a third component in addition to its hardware and software dimensions. This is the "heartware" component, a term used by the Mayor of Kawasaki, Japan, in his review of the eleven finalist's proposals in the 1987 international idea competition for Kawasaki as an advanced information age city. He used the term in suggesting to the competitors that they should not forget that in the unfolding information age, people with hearts and feelings will be the end users of all the advanced hardware and software. A "festival path of daily living" in each Kawasaki neighborhood was conceived as the physical place for that interaction. In the Fitchburg Center plan a glass domed agora in the town center is perceived as fulfilling that role. The proposed telecommunications system should support this concept by including a heartware component which provides services and facilities that stimulate interpersonal exchange beyond the wire and screen. Among such facilities which could be included in the agora plan are a "Cyberspace Cafe" in which each table is equipped with a computer and video terminal, a multimedia sports bar, an educational multimedia arcade, and a current issues forum.

A two-dimensional presentation of land uses and infrastructure facilities on a map with a verbal description of them, however elaborate, does not provide a concise image of the visual characteristics of the environment the plan intends to achieve. In the next section an attempt is made to provide an illustrated presentation of the four distinctly different environments contained in this plan.

## 7. THE PLANNED ENVIRONMENTS

Four distinct environments are envisioned to emerge from this planning effort. These are the Town Center with its link to the City Center, the Research Park comprising the office, education and biotechnology areas circling the Town Center, the Housing Clusters to the south, east and north of the education and biotechnology sites, and the Greenways and Open Spaces crisscrossing and encircling the developed areas.

### The Town Center

The Town Center will be a compact, densely built area with a pedestrian core along the proposed canal and pond system. This core will be Fitchburg's "Agora", the town center square of the ancient Greek city. It was the place where the market, the arts, the debates and the politics took place. In this modern version a variation of spaces in this pedestrian area will provide visual interest and enjoyment and places for rest and for meeting friends. This core will be covered with a high glass dome to provide shelter. However as part of the sides and the entrances will not be enclosed, the Agora will not be an enclosed, air-conditioned shopping mall. Rather it will resemble some of the European "gallerias" which provide shelter but only a modification of climatic extremes.

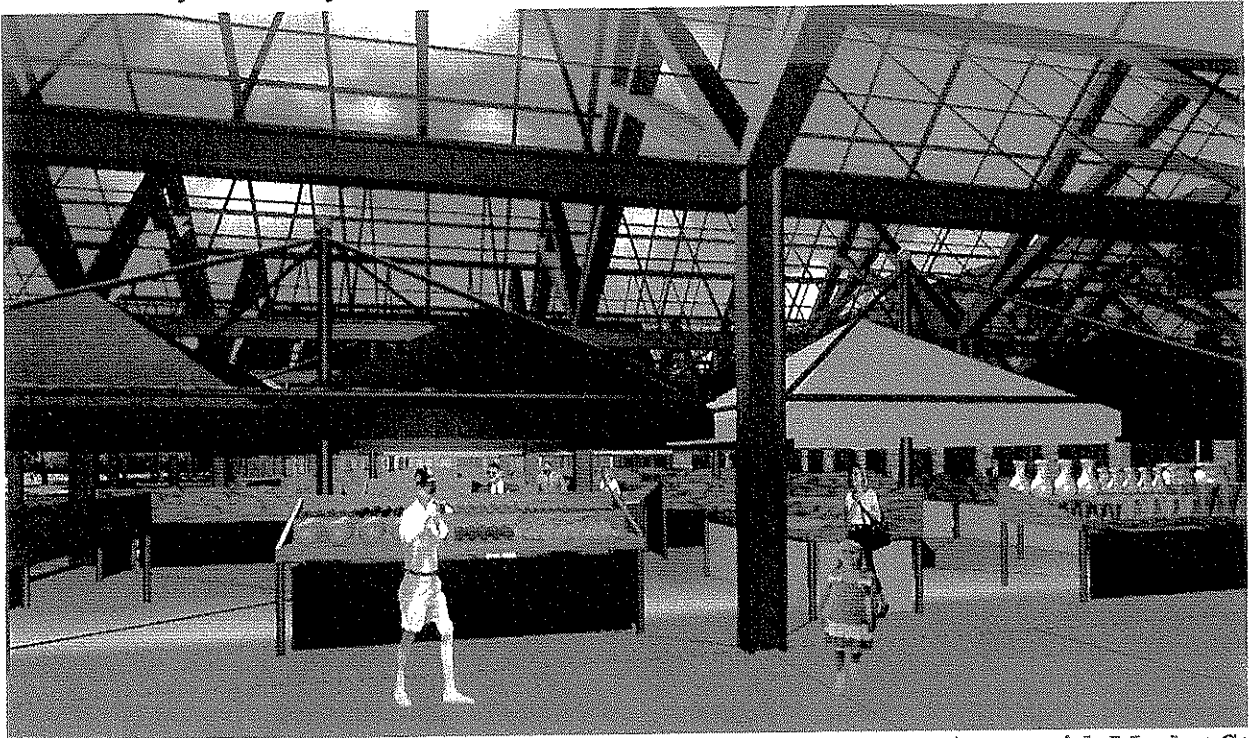


An Entrance to the Agora

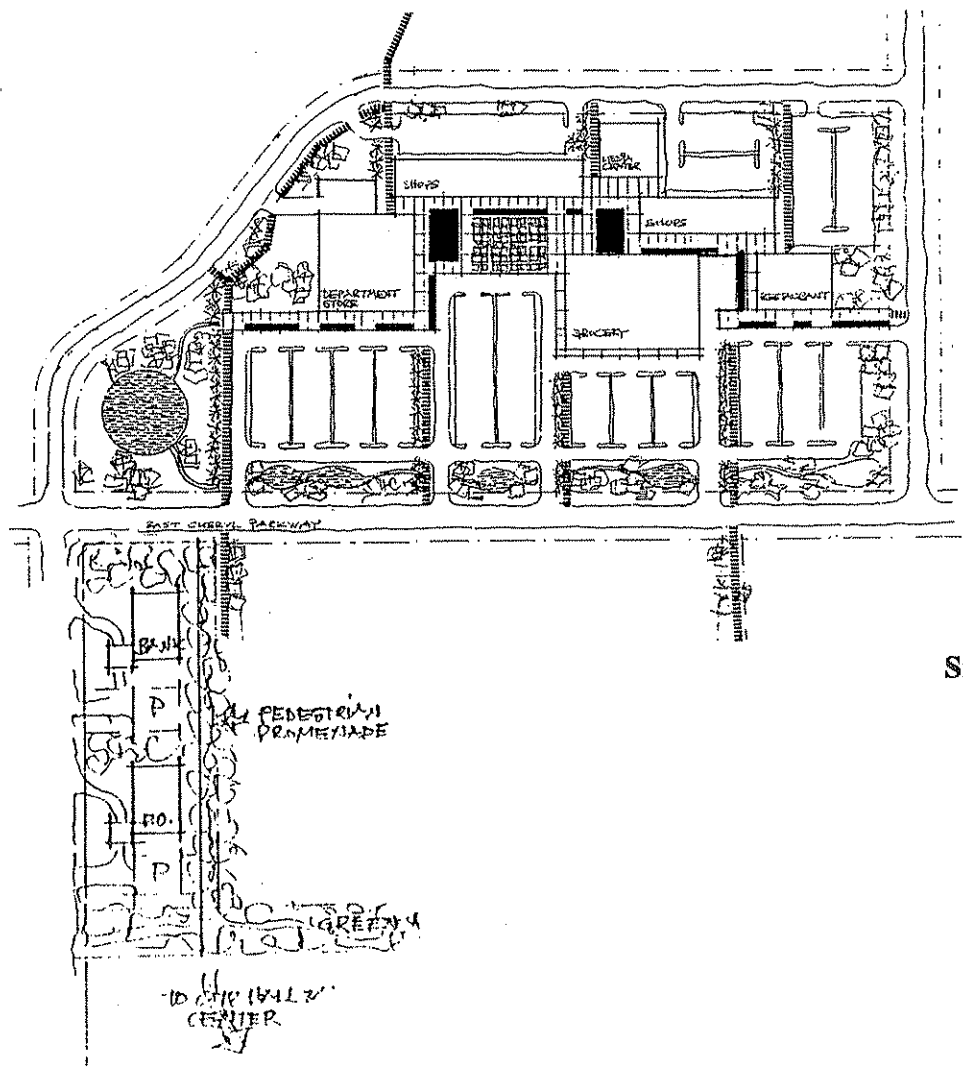


The concept of the Agora is based on the recognition that retail shopping patterns have evolved rapidly in recent years from a primarily utilitarian activity to what most retailers today recognize as a form of entertainment and social gathering whilst shopping is done. The retail environment is today as important, if not more important, than the goods and services offered. Consumers are gravitating toward places which not only offer a unique and entertaining shopping environment with interactive media and sound displays but also provide opportunities for social gathering, learning and information exchange.

The Agora is estimated to contain approximately 140,000 square feet of retail space, along with an integrated mixture of about 35,000 square feet of second floor office space and 20 - 30 one and two bedroom loft type apartments above the office floor. The retail tenant mix will be based on the synergy of two anchors, a high quality grocer and a specialty department store accounting for about half of the retail space, and a complementary mixture of small retail shops. The grocery would be primarily oriented toward the neighborhood market while the department store would serve a larger geographic market area. The smaller shops would include a mixture of businesses found in upscale shopping centers in the 80,000 to 200,000 square foot range. This may include a pharmacy, shoe store, gift shops, jeweler, book store, clothing stores, photo shop, bakery, coffee shop, restaurant, cafe, wine bar, travel agent, hair salon and health club. In addition, a market area of some 40 stalls is proposed. This market would appeal to artisans, specialty produce growers, and a variety of other trades. The stalls would be rented on a weekly or monthly basis.



Agora with Market Stall



Site Plan Sketch



South Elevation

To provide easy and convenient access to the Agora attractive parking will be located on its perimeter within a maximum walking distance of 200 feet from the retail businesses. Most stores will have two entrances; one toward the parking area and one on the interior of the Agora. Other necessary components integrated into the design of the Agora are adequate signage and functional loading facilities. The design and the environment of the Agora will provide the retailing synergy of a shopping center, yet mold the design into an attractive and appealing town center environment that will serve Fitchburg both today and into the future.

As shown on the site plan sketch the Agora complex will be linked to the City Center on Lacy Road with two or three commercial structures on the east side of the extended Research Park Drive. These sites would be offered to such businesses which customarily demand drive-in access, e.g., a bank, a

post-office without mail distribution service, etc. Automotive services, fast food outlets, and similar establishments would not be permitted. In regard to design it would be required that any buildings in this link area must have the drive in services on the Research Park Drive side and a pedestrian entry on the opposite side from the proposed walkway linking the City Center and the Agora.

With the advanced telecommunication and interactive multimedia system to be integrated into the Agora, another opportunity to attract unique retailers is provided. Such commercial operations as an information station cafe with access terminals at each table, and an educational technology arcade for children and adults can be provided. Many retailers could take advantage of the system and its services by offering customers interactive terminals to display, review and order merchandise. The system would also be useful in maintaining sales and inventory data.

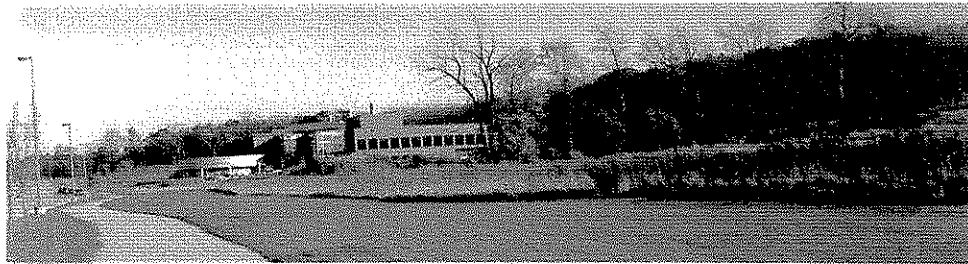
The sketches and illustrations present a visual interpretation of the Agora concept as outlined. The final design will come from an architectural design competition once commitments are obtained from the two proposed anchor stores. The developer intends to arrange the competition in order to assure that the highest quality of architectural design is obtained in the development of the Agora.

### **The Research Park**

The three new structures in the Research Park environment were designed and built according to the guidelines of the Protective Covenants. As these covenants will remain the primary guidelines for development in the three use zones of the Research Park area the photographs below should suffice to provide a visual interpretation of the intended environment.



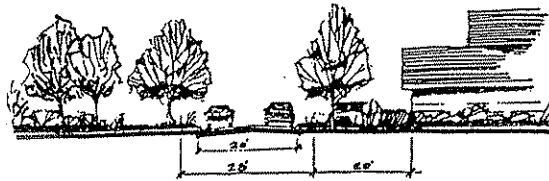
**The Promega Building**



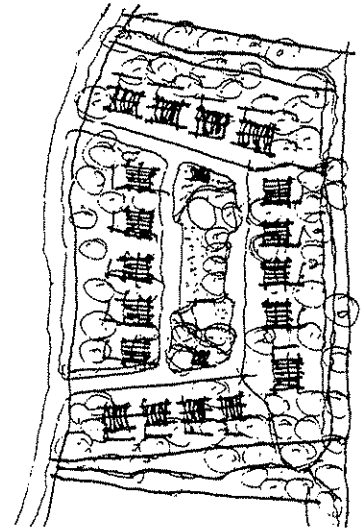
**The Biopharmaceutical Technology Center Institute Building**

### The Housing Clusters.

Because of differences in topography, orientation, shape and size, the design of the eight housing clusters will result in three conceptually different housing environments. In three, detached houses will line a central rectangular open space - a Village Green. In another three, linear town house clusters will follow the contour lines along ridges and slopes and in the remaining two the houses will be tucked into the wooded slopes in groups of two or three like grapes off a winding service road with a townhouse group at its base. The following sketches and illustrations depict the main characteristics of these three housing environments.

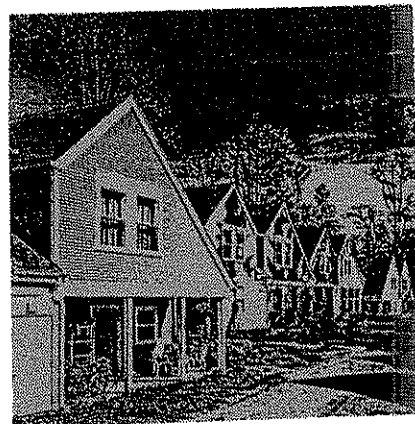


Service Lane Cross Section

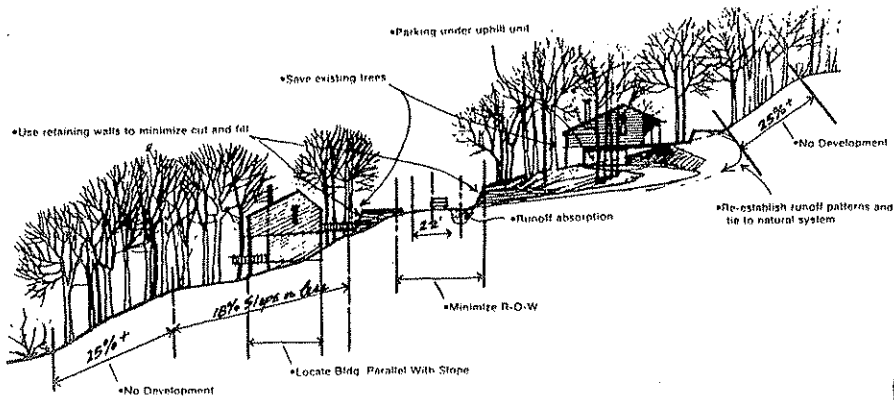


Site Plan

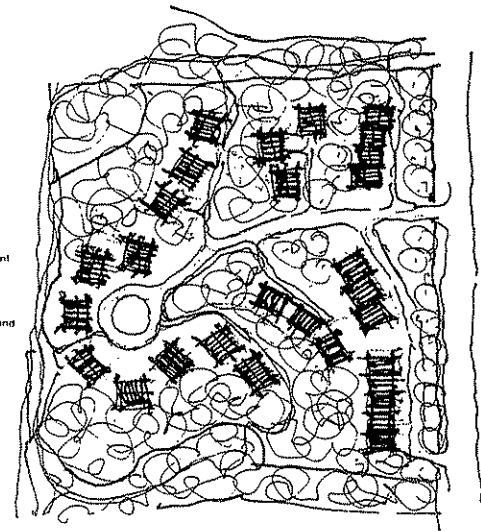
The environment of the Village Green will be park like with play areas for children and benches and picnic tables. At the lowest point there could be a small, landscaped storm water retention pond where water from this cluster is held before it reaches the main drainage system.



Rear View of Homes with Walkway

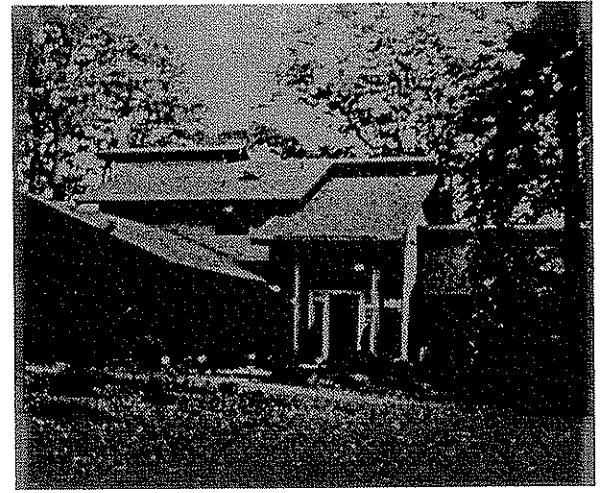
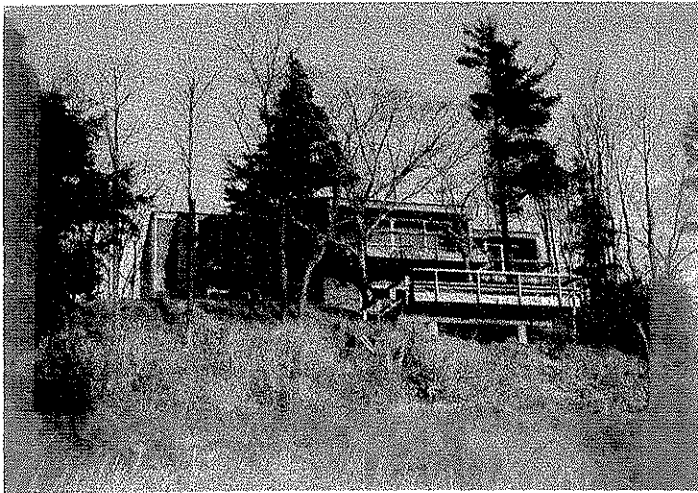


Slope Design



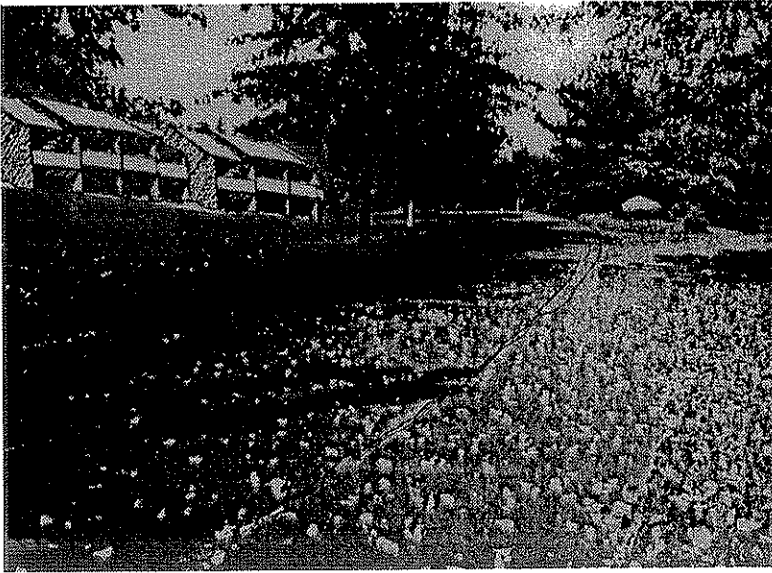
Hill Site Plan

Though all hill site clusters slope to the north and are heavily wooded they present a unique design challenge for accommodating environmental design objectives in regard to sun, wind, view, access and the preservation of the natural landscape. With skillful design these constraints can be turned around into an opportunity for creating a secluded environment with a feeling of being miles away from the city, the suburbs and the neighbors.

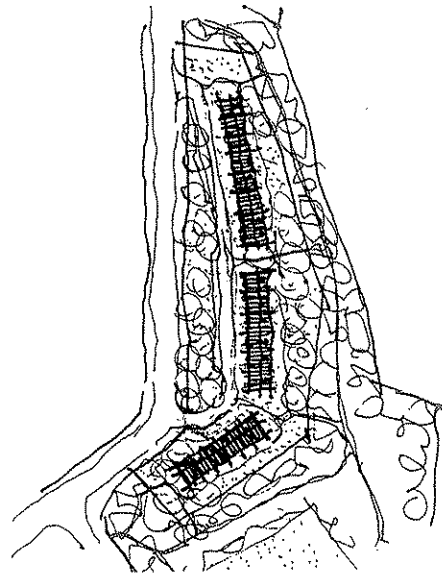


### Homes in The Woods

The units in the Townhouse Clusters will be two and three bedroom units with two full bathrooms, a large open living-dining-kitchen area, a study-media-home office room and a two car garage. They will be one or two stories high and have an enclosed patio on the south side. They will range in size from 1,500 to 2,000 square feet. They will be priced slightly below corresponding size detached homes.



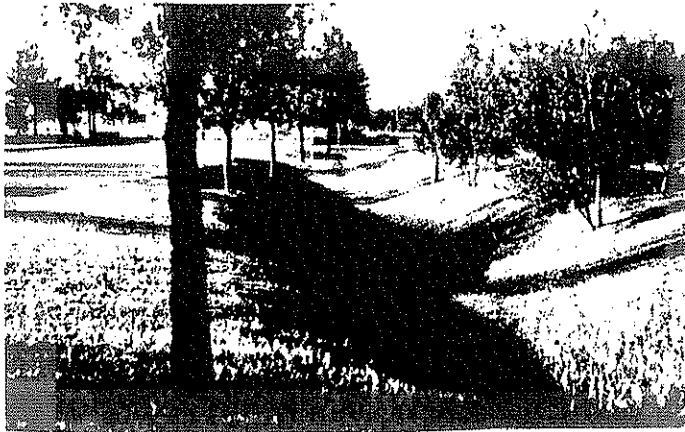
**Townhouses on the Perimeter Road**



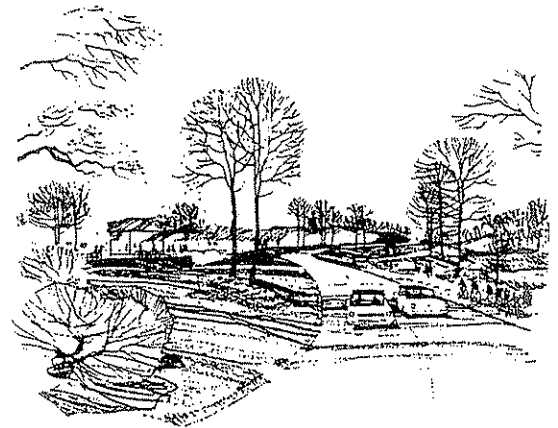
**Townhouse Cluster Sketch**

**The Greenways and Open Spaces.**

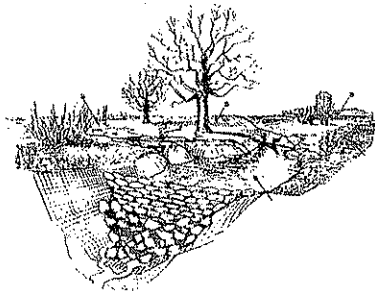
Though most of the open space will remain in its natural state, there will be man-made and management intrusions into these areas. For example, the proposed "wet" storm water drainage system despite its environmental soundness creates man made wetlands. The walkway system and the collector road, however well designed, will have an impact on the natural setting. The illustrations show how this unavoidable impact will be kept to a minimum.



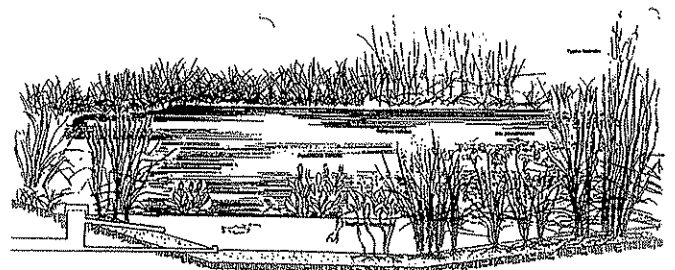
**Landscaped Drainage Swale**



**The Perimeter Collector Road**



**A Sediment Settling Basin**



**Man - Made Wetland Retention Pond**

In environmental and visual terms a concentric order is thus envisioned from a compact core to large open spaces left in their natural state. This is not a new idea. It has been one of the basic concepts of urban planning throughout history. The uniqueness of this plan is that all four environments can be experienced almost simultaneously because they lie within a few minutes walking from one another. In fact there are some points in the plan area from where all four environments can be seen and observed by turning around. This was made possible by the topography of the site and careful application of the environmental design principles underlying the plan.

## **8 ENVIRONMENTAL GUIDANCE AND CONTROLS**

Environmental considerations have been given high priority throughout the plan formulation process. However, the feasibility and practicality of integrating concerns about the environment into a community design which can be implemented was thought about extensively. This section discusses some of the component technologies considered for this plan and the environmental standards that are expected to be followed in the design and construction of the proposed plan elements and facilities.

The following aspects of design and technology were examined during the plan formulation process:

- (1) Urban runoff control,
- (2) Ground water protection,
- (3) Natural landscaping and landscape restoration,
- (4) Environmental building and construction criteria,
- (5) Energy efficient site planning and building design,
- (6) Environment -based performance standards in zoning regulation,

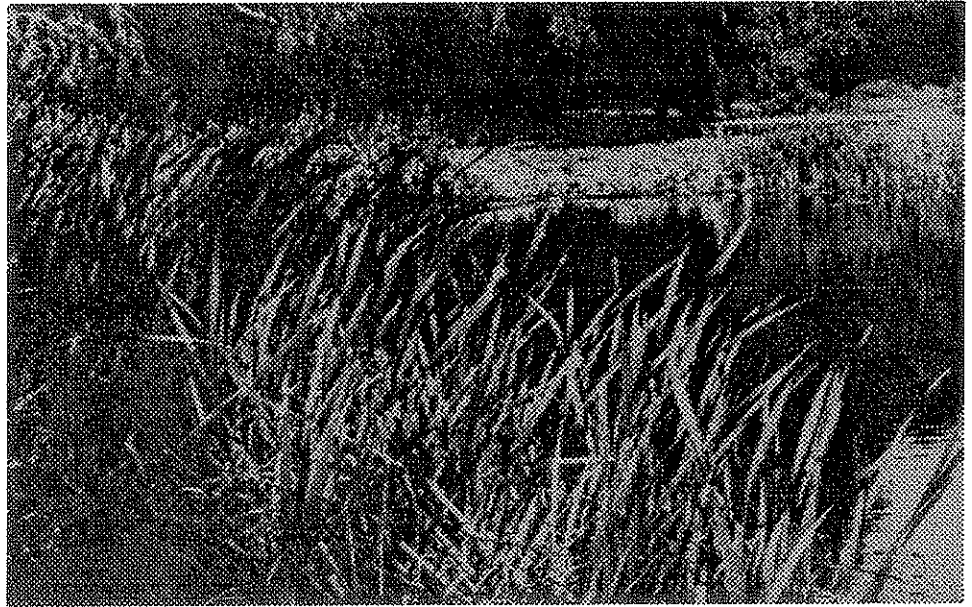
### **Urban Runoff Control**

The City of Fitchburg has an erosion control and storm water management ordinance which is based on generally accepted standards and engineering procedures. For the intent of this plan, the provisions of the ordinance will be applied to the Tax Incremental District area. The runoff calculations made in conjunction with the grading and construction of the drainage course in the Fitchburg Research Park plat will be rechecked and, if necessary, modified to accommodate the proposed redesign of the central drainage course.

In the "wet" storm water basin treatment system proposed for all runoff to the north and northeast from the housing clusters in the proposed Planned Development District urban runoff and erosion will be controlled by retaining as much of the natural landscape as possible. But just leaving the natural setting "as is" is not adequate for the development proposed. Therefore, additional measures will be taken to



control urban runoff by enhancing the natural design of the topographic landscape in the form of a combination of "vegetated filter strips" and "wet" detention ponds. Vegetated filter strips planted with ground cover and native ornamental grasses slow down runoff and allow the surface water to permeate the underlying soil. The efficiency of such a system can be high depending upon the slope, the "roughness coefficient" of the vegetation, and the length of the strip. For example, a 200-foot vegetation strip with a slope of 2% and plantings in a light turf can trap runoff water pollutants at a 95% efficiency rate.



#### **Aquatic Vegetation Purifies Urban Runoff in Wetland Pond**

A "wet" storm water basin can trap from 80 to 100% of the suspended sediments and remove from 40 to 80% of the nitrogen, phosphorous, and trace metals held in the runoff water. The detention ponds will be designed aesthetically and will be the appropriate size for the site it serves. About a quarter of a pond is open water of up to 4 feet, with the other three-quarters anywhere from one-half foot to 3 feet deep and planted with clustered wetland vegetation. Thirty percent of the shallow water vegetation may include as many as four or five native wetland species. Another typical criterion for size design is one acre of pond surface area for the catchment of every 45 pounds of phosphorous or for every 225 pounds of nitrogen per year. Data exist for making urban runoff pollutant content calculations based on the type and area of a development and the number of housing units. Soil conditions will determine if these ponds will be lined to prevent permeation.

### **Ground Water Protection**

With no published ground water maps available for Dane County, one can only assume that the northern slopes of the site are part of the Nine Spring Creeks recharge basin with several of the springs at the site or adjacent to it. This requires that in this area in addition to the proposed runoff control measures outlined above measures must be taken to reduce runoff. Therefore it will be required that in all residential clusters nearly all of the area is left covered with natural vegetation which reduces the coefficient of runoff. Furthermore, in accord with the environmental mandate of this project, landscaped areas will not be treated with chemical fertilizers and pesticides. Other means for reducing runoff which will be considered in the final design of each cluster is a reduction of impervious surfaces and the use of permeable surfacing materials such as "turfstone" or "grasspave" on terraces, walkways, parking areas and driveways.

### **Natural Landscaping And Landscape Restoration**

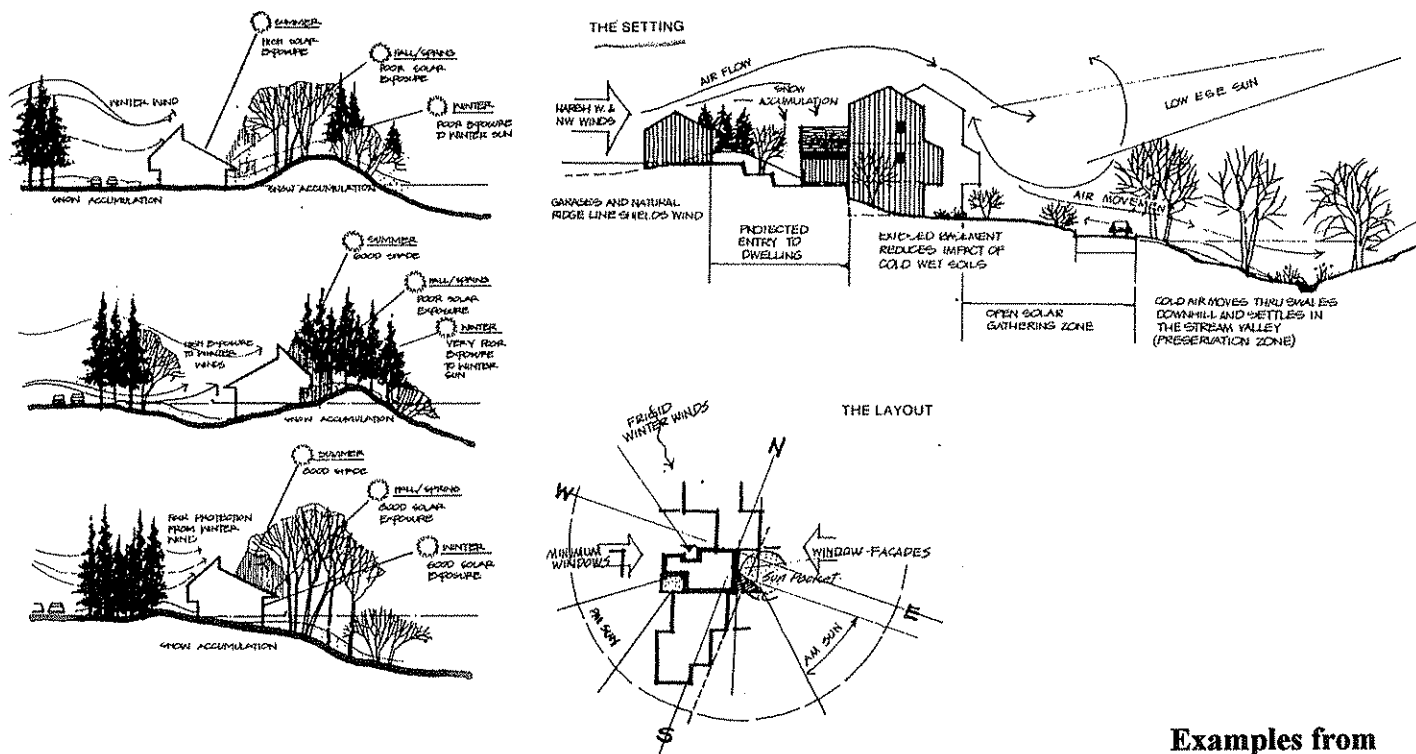
Much of what is important to controlling urban runoff and erosion and to protecting the local ground water supply is related to landscaping controls, landscape preservation and restoration. Although all of the open land and large parts of the wetlands have been under cultivation and the wooded areas are second growth woodlots, it is proposed that during the development process they be restored in so far as possible to the original prairie and "oak openings" landscape, which will in turn support the environmental mandates of controlling runoff, erosion, and ground water quality as previously described. This will require a detailed landscape survey of each sub-area of the land use plan prior to actual development and the preparation of a landscape plan and restoration program.

### **Environmental Building And Construction Criteria**

David Rousseau of Archemy Consulting, a member of the Fitchburg Center advisory group, has provided a series of reference materials, copies of which will be provided with the reference file. It should be noted that in the application of any of the recommendations in these materials, three aspects must be constantly monitored. One, this is a relatively new, but fast developing area of professional understanding and competence as well as technological advance. Hence, change is constant and obsolescence of concepts and technologies rapid. Two, the availability of materials may be limited or the cost prohibitive. Therefore the balancing act between what ought to be and what can be becomes part of the daily decision equation. Lastly, the building trade world wide is the epitome of "nostalgic inertia" - that is doing things the way they always have been done. At Fitchburg Center only contractors who are willing to do things differently will be engaged. Most importantly, they must provide a crew that also is creative.

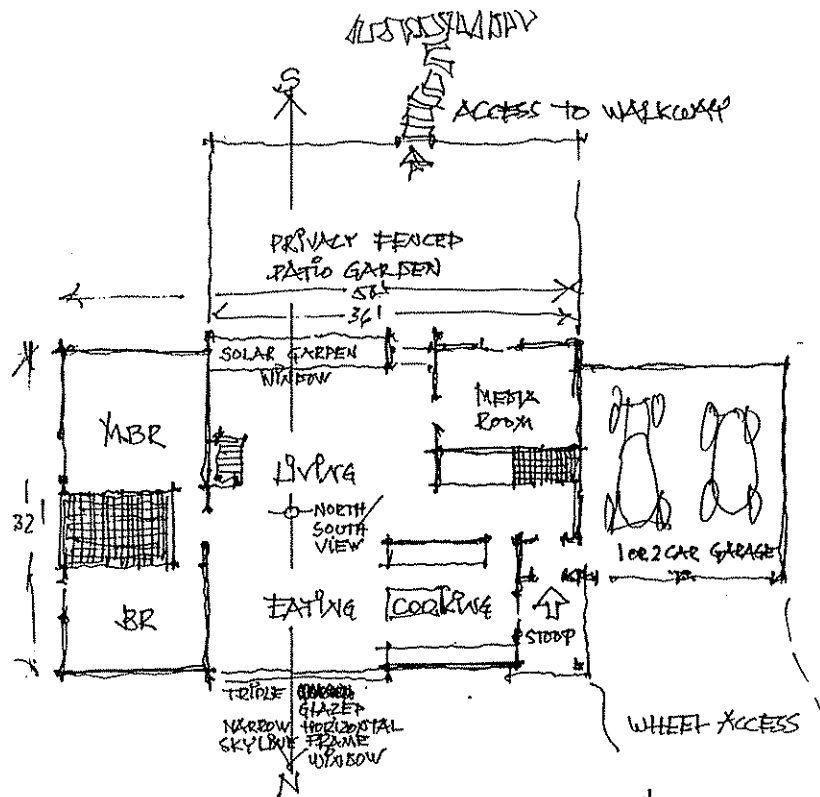
## Energy Efficient Site Planning And Building Design

It is obvious that in an environmentally sound development, site planning and building design is guided by generally accepted principles of energy efficiency in the siting of buildings, in landscaping the site, and in the design of each building. Guidelines detailing such principles are included in the project reference file and all architects commissioned to design buildings in the plan area will be required to apply these principles. Some schematic illustrations from these guiding materials are shown below.



Examples from  
Environmental Site Planning  
and Design Guidelines

A specific recommendation is made in regard to the orientation and design of most if not all housing units. Due to the topography of the site the main view of all housing sites is to the north or northeast. From many of the locations a spectacular view of the Madison skyline can be obtained. Normally one would design the house with a living room with a large window exposure towards the view. This design would not meet energy efficiency requirements. The conceptual design on the next page would satisfy both the energy efficiency requirement as well as the view opportunity. This design would also satisfy the Radburn objective by providing a wheel side and a walk side for each house. In addition it provides an enclosed private outdoor space for those who would like to have a small garden of non-native flowers and plants without violating the overall principle of natural prairie-type landscaping.



CONCEPT FOR 1,500 #  
 2 BR ONE STOREY UNIT  
 CONCEPT APPLICABLE TO  
 ANY SIZE 3-4 BEDROOM  
 TWO AND THREE STOREY  
 UNITS DEPENDENT ON  
 SITE AND SLOPE.

**Home Design Concept Sketch**

**Environment - Based Performance Standards**

Most zoning ordinances follow the general pattern of containing lists of permitted uses, conditional uses and specifications regarding densities, building lines, building heights, parking requirements, etc. stated as precise numbers, ratios, distances, etc. The Planned Development District Concept allows for a reduction in this rigid specificity. However, most PDD ordinances still follow the tradition by writing different and somewhat more flexible specifications. In a true performance ordinance the provisions are qualitative instead of quantitative, and in most instances where calculations are made to ascertain if the limits of social, environmental or aesthetic tolerance are not exceeded, the calculus contains more than two considerations.

Our analysis determined at an early stage of plan preparation that a specification type ordinance could not accomplish the environmental goals of this project. Therefore it is suggested that selected sections of this report with its detailed descriptions of the intent of the plan, its performance and its environmental objectives substitute for a separate PDD ordinance which will have to accompany the plan when submitted to the City of Fitchburg for adoption.

## 9. THE IMPLEMENTATION SYSTEM

The areas for the various organizational arrangements recommended for plan implementation are shown on the fold-out maps 18 and 19 entitled The Implementation System and Proposed Zoning Changes. The word "system" was chosen in recognition of the fact that the implementation of the proposed plan and its environmental objectives could not be accomplished without applying a variety of approaches each uniquely useful for accomplishing the objectives of a particular plan component. On the other hand, to accomplish the integrated overall objective of the plan, all arrangements should be viewed as components of an implementation system. These components are described in the order they are listed on the plan map legend.

### **The Planned Development Districts (PDD)**

As mentioned earlier it was clear from the outset that the objectives and the philosophy underlying the formulation of the plan could not be accomplished under traditional plan formulation and implementation methods, that is master planning and zoning. However, a total break with current regulations was considered impractical, in particular in regard to the area in the Tax Incremental Financing district. Therefore the Planned Development District approach was chosen as the main institutional framework only for areas not covered by the TIF. The TIF area would remain regulated under current zoning provisions excepting the Town Center area for which a separate PDD is proposed. Because of topography and drainage a small sliver of land in the north-east corner of the TIF is included in the residential PDD. This change has no impact on the TIF because for all practical purposes is not suited for industrial or commercial development and can not be serviced by TIF utilities and streets.

Two basic plan levels are therefore proposed: (1) the overall advisory level of the General Development Plan for Fitchburg Center encompassing the entire plan area and (2) a level of two Planned Development Districts for which formal adoption and district designation in the city's Zoning Ordinance is sought. The two PDD's are the Town Center District and the Residential Cluster District.

In regard to their zoning status the areas not included in the PDD's will retain their current designations except for the one area shown on the Proposed Zoning Changes map. According to the Zoning Ordinance, a Planned Development District has no "set" standards and specifications but allows a developer to propose uses and combinations of uses and configurations of intensity and density of development. It is believed that the plan in all of its aspects meets the intent of the ordinance. Furthermore, the two step PDD approval procedure which requires the submission of a detailed Specific Implementation Plan before any development can take place assures that the City has full control over each step in the plan implementation process.

### **The Individual Development Sites**

The yet undeveloped areas designated for Conference and Education Facilities, General Offices and Research and Biopharmaceutical uses on the Land Use map are recommended for development in individual parcels of varying size over time as demand arises. The developers of these parcels would have to follow in all aspects the environmental design and construction guidelines established in the plan and would have to submit all plans for review and approval to the architectural review committee operating under the protective covenants overlaying these area before submission to the City. All of the proposed sites in this development category except one to the north of the Woods Hollow Child Care Center are located on improved streets with utility services. Also, the proposed uses are permitted under the current I-S, Specialized Industrial zoning provisions. For this reason development on most of these sites can proceed at any time independently of General Development Plan approval.

### **The Master Condominium**

During the detailed analysis of the site characteristics of the area designated for residential use it was recognized that albeit the PDD provided considerable leeway for the accommodation of many of the environmental objectives of the plan, some could not be achieved. The most critical were in the area of roads and road standards and open space development and maintenance, like the proposed path and drainage systems. It was concluded that the area reserved for the residential cluster sites and the surrounding open spaces, green ways and drainage corridors should be privately developed and maintained. The Master Condominium concept provided by Wisconsin legislation was considered the most appropriate organizational form to satisfy all aspects of the plan. Being a legal entity and having assessment powers it was considered a much stronger institution to carry out its development and service obligations than, for example, a homeowners association. The Master Condominium concept provides also for a more flexible application of staging in the development of the residential clusters than if the area were to be developed as a single condominium.

The major responsibilities of the master condominium are: maintenance of the perimeter collector road with its bicycle path and water and sewer mains; maintenance of the drainage and storm water runoff system with its detention ponds; maintenance of the grounds and open spaces surrounding the residential clusters and the walk and skiways and other recreational facilities on these grounds; and the maintenance and management of the neighborhood center, playground and allotment gardens. In addition, the maintenance and operation of a sanitary lift station, if required, would be a responsibility of the Master Condominium. The construction of these facilities would be done by the developer of the residential component of the plan.

### **The Condominium Sites**

It is proposed that each cluster be organized as a separate condominium under the master condominium umbrella. In dividing the residential units of the total residential area into these small 20 - 30 unit condominiums several advantages can be obtained. Each condominium consists of group of clustered units with a clear physical and visual sense of coherence and mutuality of interest. The small group allows for easy participation in the management of the condominiums affairs. By keeping each cluster a separate condominium differentiation in the design and housing characteristics of each cluster is facilitated. Upon down payment buyers participation in the design process will be encouraged. Each condominium will be responsible for the management and upkeep of the site and improvements thereon beyond the footprint of the house and any enclosed patio area which is part of the unit. In addition the condominium association will maintain and operate the central heating unit if a cluster district heating system is provided.

### **The Greenways**

In the Individual Development Site area a number of open spaces and greenways are shown separating some of the sites from one another. These greenways which are part of the large system lacing the entire plan area pose a management problem different from that in the Master Condominium area. The problem relates to their ownership after the abutting properties are developed, leased and, possibly, sold. As the Faraday Center and the Guest and Earth houses are abutting these greenway segments it is proposed that the greenways remain FRPA property, and be maintained by Fitchburg Center Corporation. The cost will be assessed against all future owners of abutting property benefiting from these open spaces and greenways.

### **The Reserve Areas**

The purpose and role of the E-Way and wetlands reservations and the development reserve in the implementation system have been mentioned earlier. Actions in regard to the two first ones will commence in the near future.

### **The Proposed Zoning Changes**

As shown on fold-out map 19 the three proposed zoning changes will make the City's zoning maps conform to the proposed land uses and development guides of the Fitchburg Center General Development Plan. The proposed zoning changes can be described as follows:

(1) Rezone Lot 1, Certified Survey Map 6142, containing 16,555 acres, from B-G, General Business, to I-S, Specialized Industrial.

The purpose of this request is to reduce pressure for commercial development at Fish Hatchery Road intersections and further explained in section 6, The General Development Plan. Upon expiration of the TIF a follow-up request will be made to rezone the southern two thirds of this lot as Parkland.

(2) Rezone Lots 4 - 12, Fitchburg Research Park Plat, containing 15,035 acres, and Lot 2, Certified Survey Map 6142, containing 2,657 acres, from I-S, Specialized Industrial, to PDD - TC, Planned Development District - Town Center.

The purpose of this request and the proposed permitted uses and development controls are described in the applicable sections 6, 7 and 8, The General Development Plan, The Planned Environments and Environmental Guidance and Controls.

(3) Rezone the four parcels outlined in fold-out map 19 as follows: Beige Parcel A containing 91.426 acres from I-S, Specialized Industrial; B-P, Professional Office; B-G, General Business; and A-T, Agricultural Transitional to PDD - CR, Planned Development District - Cluster Residential. Light green Parcel B containing 11.228 acres from B-P, Professional Office District to P-R, Park and Recreation District. Brown Parcel C containing 4.503 acres from B-G, General Business and B-P, Professional Office to R-M, Medium Density District. Dark green Parcel D containing 75.029 acres from B-G, General Business; B-P, Professional Office; A-T, Agricultural-Transitional to P-R, Parks and Recreation District.

The purpose of this request and the proposed permitted uses and development controls are described in the applicable sections 6, 7 and 8, The General Development Plan, The Planned Environments and Environmental Guidance and Controls.

Application for these Zoning Changes have been submitted concurrent with the application to adopt this General Development Plan as an overall guide for the development of Fitchburg Center.



### **Proposed Phase I Development Schedule**

1. Upon approval of the proposed zoning changes Fitchburg Center Corporation, as the development arm of the land owners, will initiate negotiations to obtain an easement for sewer construction from the northeast corner of the PDD zone to the Metropolitan Trunk Sewer as shown on Map 17 of the General Development report.
2. Parallel with sewer R-O-W negotiations, discussions will resume with the County Park Commission regarding their acquisition of the 75 acres of open space shown as E-way reservation on the Fitchburg Center General Development Plan.
3. Upon obtaining the sewer R-O-W, sewer construction will commence together with construction of the eastern north-south leg of the private collector road. This will allow the development of the two housing clusters on the field to the east of the Promega Corporation site. It is expected that these steps will be completed by the end of 1997.

## 10. IMPACT ANALYSIS

A multi-use development of the scale of Fitchburg Center entails various environmental, social, economic, fiscal and infrastructure impacts on the community in which it is located, on the immediate surroundings of the project site, and on the site itself. At each of these geographic levels the nature and the effect of the impacts differ. To facilitate the analysis of the various impacts and their interaction the following impact matrix was developed listing the impact levels on the vertical axis and the impact areas on the horizontal axis. The numbers in each cell of the matrix suggest the importance of the various impact categories at each geographic level ranging from high, indicated by a number 3, to low, a number 1.

	ENVIRONMENT	SOCIAL	ECONOMIC	FISCAL	INFRASTRUCT.
CITY	1	2	3	3	1
NEIGHBORHOOD	2	3	1	1	2
SITE	3	1	2	2	3

**THE IMPACT MATRIX**

In the following each of the five impact categories is briefly described in juxtaposition to the logical alternative which is the no plan alternative which assumes that the status quo of the plan area will continue. This means that current zoning remains in force, that no concerted effort is made to attract development to the outmoded and unattractive Fitchburg Research Park plat, and any development which may be proposed would be judged and approved without attention to the environment and the broader opportunities of location and site.

### **Environmental Impact**

Due to the emphasis on maintaining and utilizing the environmental characteristics of the site and the broader environmental features and proposals along the northern border of the site, the plan will not result in negative impacts at the site and neighborhood levels. To the contrary, the proposed prairie and

forest restoration and the drainage and storm water management proposals of the plan will enhance the environment of the site. Also the E-way reservation with its trail access facilitates the implementation of these regional environmental proposals which benefits the city and its northern neighborhoods.

### **Social Impact**

The character of the proposed residential development is intended to serve all age groups as well as to provide some housing for the handicapped as well as for moderate income households. It is felt that the flexibility which the proposed bedroom measure will provide in the design of each housing cluster, will facilitate achieving the social objectives of the plan and that the expected resident population of 500 - 750 at full development will be less stratified by age and income than the population in most current subdivisions. Consequently, the school age population will be lower than currently found in Fitchburg's new subdivisions - 20 - 25% instead of 30 - 40%. The proposed town center with its Fitchburg Agora shopping area will also generate positive social impacts by strengthening public investment already in place - the Civic Center - and by encouraging additional public investment in that location. In the no plan alternative no Agora would be constructed and the likelihood of the kind of housing envisioned in the plan would be slim. A conventional subdivision is a more likely outcome with a substantially greater social impact cost consequence.

### **Economic Impact**

Given the no plan alternative to the proposed plan which means continuation of the status quo with no incentives to the owners of the property to pursue aggressively the development of the site, the plan provides a vehicle which stimulates an organized and active development process. The incorporation of the Fitchburg Center Corporation has initiated this process and steps have been taken to solicit investment and participation in development activities. Thus a wide range of positive economic impacts can be expected in the next five to ten years. It is estimated that at full development the Town Center and the office, conference and education facilities areas would provide space for up to 1,500 workers and the biotechnology complex for an additional 2,000 or a total of about 3,500 jobs.

### **Fiscal Impact**

If the development potential as outlined is fully utilized, the total cost for implementing the proposed plan is estimated at \$150,000,000 - 175,000,000 in current dollars in addition to the \$28,000,000 of assessed value increase accrued to date. Of this new investment \$35,000,000 is for the residential portion of the plan. For the City of Fitchburg in terms of future tax revenue the fiscal impact is significant. Not only will the obligations incurred under the TIF be successfully satisfied, their satisfaction will take place on an accelerated schedule whereas the status quo alternative would keep satisfaction at the current schedule.

### Infrastructure Impact

All proposals for the development of the central part of the plan - the town center, the biotechnology expansion, the office and research area and the sites shown as conference and education sites - are served by utility infrastructure already in place under the TIF program. Therefore this plan element has no impact on utilities except that it brings capacity to full utilization. Also, all needed roads except the East Cheryl Road extension to Lacy Road are in place and designed to handle the traffic increases generated by the proposed development. In the no plan alternative capacity utilization would remain low for an indefinite future and no relief route for Lacy Road would be provided. Thus both at the site and the city levels the plans impact will be positive.

In the proposed residential PDD all infrastructure elements will be implemented and maintained by the Master Condominium Association. Thus the plans impact is limited to the site and no impact can be attributed to the neighborhood and city levels. However, in a no plan case any residential development that eventually would occur at the site would require municipal services and, because of location and topography, entail substantial cost related impacts to the city.

LAND USE	DEVELOPMENT POTENTIAL (SQ. FT.)	AVERAGE TRIP GENERATION RATE FOR 1000 SQ. FT.	AVERAGE DAILY TRIP GENERATION	PEAK TRIP GENERATION
1. GENERAL OFFICES	280,000	8.63	2415	420
2. BIOTECHNOLOGY & RESEARCH	800,000	7.70	6160	985
3. EDUCATION & CONFERENCE	225,000	9.57	2150	500
4. TOWN CENTER				
A. RETAIL	140,000	54.40	7630	815
B. OFFICES	30,000	11.42	340	55
C. APARTMENTS	24 UNITS	6.59	160	10
5. RESIDENTIAL	200 UNITS	7.44	1490	100
ESTIMATED TRIP GENERATION AT FULL DEVELOPMENT			20,345	2,885

**TABLE 9: TRAFFIC GENERATION BY LAND USE**

*Source: Trip Generation, Institute of Transportation Engineers, 5th Edition, 1991*

As shown in Table 9, the projected jobs at the site will generate an estimated 3 trips per workday per employee for a total of about 10,500 trips. The residential trip generation is estimated at 6.5-7.5 daily trips per dwelling unit for a total 1,650 trips. The Town Center's shopping trip generation is more

difficult to estimate because the amount of traffic generation will depend on the kind of anchor stores that can be attracted to locate here. Assuming a best case scenario which will generate maximum traffic, and using Urban Land Institute and Institute of Transportation Engineers data for this scenario, the proposed Agora will generate 7,600 daily trips. This gives a total Average Daily Traffic generation of 20,345 at full plan area development. As full development is 5, 10, 15 years in the future the above calculations have no significant value. In addition, daily trip estimates expressed as Average Daily Traffic - ADT - are poor indicators for assessing traffic impact. Different land uses generate a different trip distribution on an hourly, daily and seasonal basis, by direction, by destination and by vehicle type. For example, in the Fitchburg Center case, most employee trips are inbound in the morning and outbound in the late afternoon going in the opposite direction of major traffic flow in the Fitchburg area. The Agora traffic has its peaks on Saturday afternoons and is rather evenly distributed during weekdays. Most of the northbound residential traffic will exit and enter from Glacier Road without loading the Fish Hatchery - McKee Road intersection. Based on current metropolitan residential and employment locations it is estimated that for the foreseeable future the trip distribution to and from Fitchburg Center will be 75% to and from the north using Fish Hatchery Road, 15% to and from the west using Cheryl and McKee Roads, 5% to and from the east using the proposed East Cheryl Parkway link to Lacy Road, and 5% to and from the south along Fish Hatchery Road. Taking into account all variations in the distribution of the estimated traffic volumes, the carrying capacities of the City's existing street system can easily absorb the additional traffic generated by Fitchburg Center.

The environmental impact of traffic is therefore small and would be the same or greater under a no plan alternative because more area would be developed at higher intensities as proposed in the plan. Also there would be no incentive for the developer to build the East Cheryl Parkway - Lacy Road link forcing more traffic on the densely built segment of Lacy Road. This would put pressure on the City to implement at an early date one of the expensive relief routes proposed in the City of Fitchburg General Plan.

## City Ordinance-General Development Plan Cross-reference

### City Ordinance Section 22.83

#### *Procedure: General Implementation Plan*

### Fitchburg Center General Development Plan

1. A map of the project area including its relationship to surrounding properties and topography and other key features.
 

*Map 3 - Page 10 ; Map 4 - Page 13 ; Maps 6-10 - Page 23-25 ;  
Fold-out Map 11*
2. A statement of rationale as to why Planned Development District zoning is proposed. This shall identify barriers that the developer perceives in the form of requirements of standard zoning districts and opportunities for community betterment the developer suggest are available through the proposed Planned Development District zoning.
 

*Stated in transmittal letter*
3. Brief analysis of social, environmental and economic impacts on the community of the project, and positive relationships to the Land Use Plan.
 

*Chapters 2 & 3 - The Regional Context and the Local Context,  
Chapter 10 - Impact Analysis*
4. A general development plan of the proposed project showing at least the following information in sufficient detail to make possible evaluation against criteria for approval.
 

*Fold-out Maps 14,15*

  - A. Public and private roads, driveways and parking facilities.
 

*Pages 34-38 - Public & Private Roads, Parking, Walkways ;  
Map 16 and Figure 1 - Pages 35-36*
  - B. Land uses and size, arrangement and location of lots and proposed buildings or groups of buildings.
 

*Pages 31-34 - Land Use ; Chapter 7 - Planned Environments;  
Pages 53-55 - Environmental Building and Construction  
Criteria  
Included in above*
  - C. The types, size and location of structures.
 

*Map 17 - Page 39; Pages 38-42- Utility Easements ; Pages 51-  
52 - Urban Runoff Control*
  - D. A general utility plan.
 

*Pages 49-50 - Greenways and Open Space*
  - E. The location of recreational and open space areas and facilities and specifically describing those that are to be reserved or dedicated for public acquisition and use.
 

*Pages 49-50 - Greenways and Open Space ; Pages 51-53 -  
Natural Landscape Treatment*
  - F. General landscape treatment plan.
 

*Page 33 - Development ; Page 32,33 - Density ; Page 33 -  
Table 8 Land Use Acreage and Development Potential ; Page  
33, 43- Ratio of Land Use ; Page 60 - Staging of Development;  
Page 61-64 - Economic Analysis of development*
  - G. Statistical data on size of the development, density/intensity of various parts of the development, ratio of various land uses, economic analysis of the development, expected staging , and any other plans or data required by the Plan Commission or Common Council.
 

*Transmittal letter; Fold-out Maps 12, 18, 19 ; Chapter 9 - The  
Implementation System*
5. General outline of the intended organizational structure for a property owners association, if any; deed restrictions and provisions for private provision of common services, if any.