

Site A: Waterbury Village Infill Exercise

Background Information

Waterbury has designated its historic village as a growth center, yet a large portion of the village lies in a flood hazard area. The vulnerable areas are depicted on the base map (see link above) in light blue (100 yr. flood) and red (500 yr. flood). The Flood of 1927 took a devastating toll on Waterbury, washing out rail lines, roads and bridges and destroying many homes. Much of the village was inundated again during Tropical Storm Irene with resulting damage to many village buildings and the State Office Complex. Areas flooded by Irene are shown on a map in the attached pages.

The town's 2003 Municipal Plan states its commitment to reinforcing the commercial role of the village and supporting ongoing efforts to restore and protect historic buildings. The document cites the important role that residential neighborhoods as well as industrial lands play in balancing uses in the growth center. (See attached sheets)

The state is planning to return some state office functions to Waterbury in a partial reconstruction of the historic office complex. The current plan (attached below) calls for the demolition of many of the existing buildings and flood-proofing a core group of the most historically significant structures. In addition it will construct a new large office building on the site which will be set above flood elevation.

The town hired a consultant to study of the bridge on Winooski Street, downstream from the office complex to determine whether the bridge constricted river flow and exacerbated flooding during Irene. It was determined that the problem lay further downstream where the river takes a sharp bend and flood storage has been constricted by a railroad embankment. Plans are under consideration for floodplain restoration along that river bend.

The Design Problem

With few undeveloped parcels remaining in Waterbury Village, how can the town add housing, commercial and industrial space?

Where should new homes and businesses be located and what form should they take?

Your group will look for infill possibilities and work together to locate development on parcels scattered throughout the village. Using the wooden blocks (3D!) add buildings and clusters of buildings where you see redevelopment potential.

Density and compactness of form will be required to maximize the potential of the few sites on higher terrain. You will also be expected to follow the requirements of Waterbury's town plan and respect the historic building pattern of the village and create a pedestrian friendly environment. Your group should also apply the lessons learned from

the morning's presentations and employ flood resistant building techniques in hazard areas and green infrastructure throughout the village.

Site B Montpelier Urban Design / Green Infrastructure Plan

Background Information

Montpelier's downtown has suffered repeatedly from winter ice jams (see 1998 Flood Plan below) and run of the river flooding that damage homes and businesses. A particularly vulnerable location is the confluence of the North Branch and Winooski Rivers in the heart of downtown. This area and the land extending to the west along the riverfront is now a large loosely organized and partially paved and partially gravel parking area. The confluence area becomes a gathering place once a week during the growing season when it hosts the farmers' market. The railroad corridor is used by pedestrians as a short cut. Otherwise most people experience this waterfront area while parking their cars.

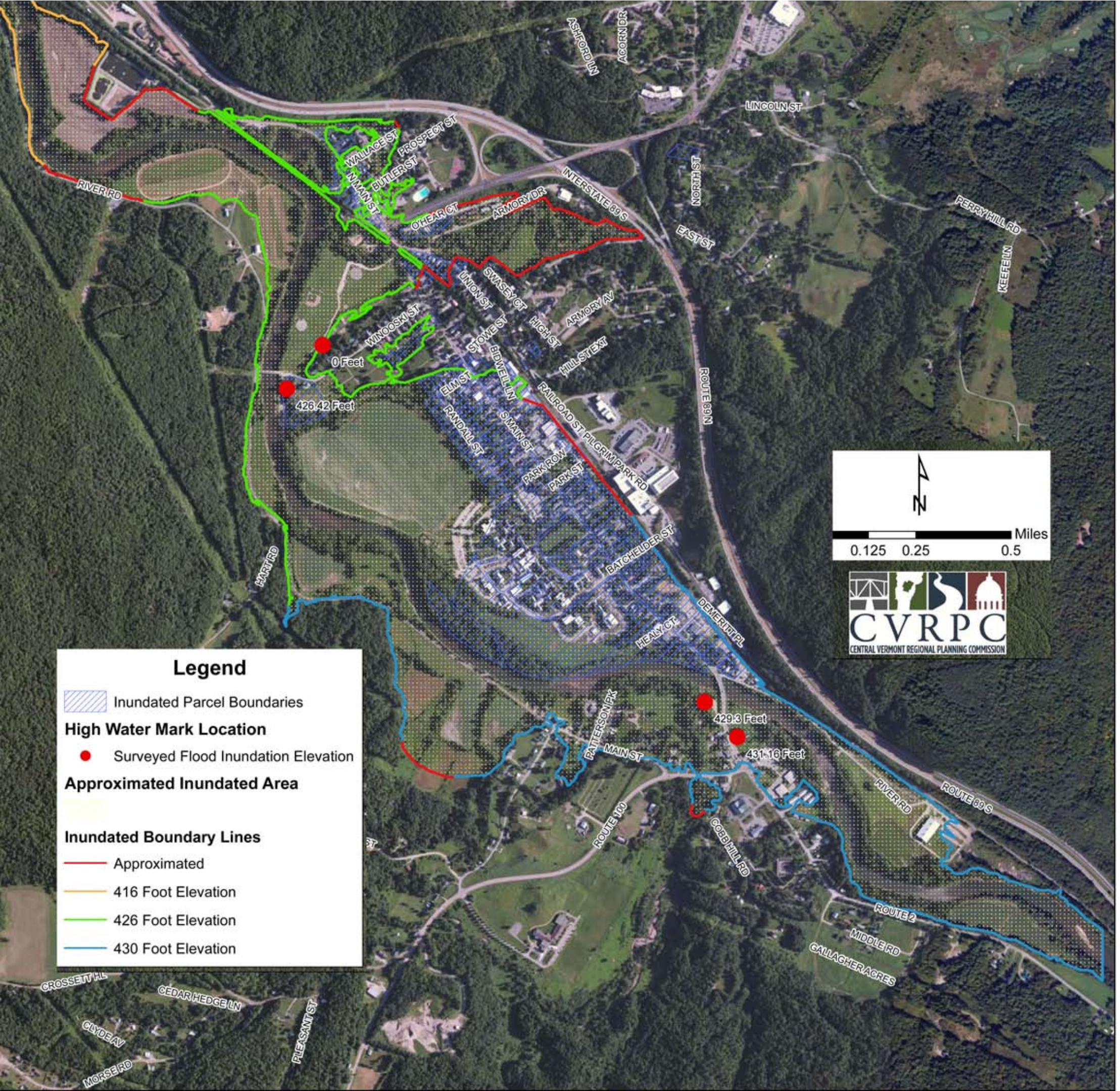


In 2000 the city and state commissioned a study of the riverfront area to develop “mutually beneficial future development plans.” The Capital District Master Plan (excerpt attached) examined future office needs of the Capital, the alignment of a greenway along the river, and the potential for a multimodal transportation center and private development. Few elements of the plan have been pursued. The district heating plan is underway, and the city mentions the greenway and transit center in its growth center application (excerpts also attached).








The Design Problem

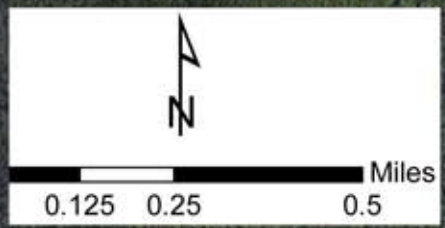
Develop a plan for the site that uses the area in a far more productive way, providing public amenities, economic development opportunities and environmental benefits

- 1) provides Montpelier residents and visitors opportunities to connect more directly with the river through a series of public spaces
- 2) protects water quality with “green infrastructure” elements to capture and filter storm water,
- 3) creates pedestrian and bicycle connections throughout the site, and
- 4) offers opportunities for compact mixed-use infill development
- 5) lowers the potential for future damage from flooding



Legend

-  Inundated Parcel Boundaries
- High Water Mark Location**
-  Surveyed Flood Inundation Elevation
- Approximated Inundated Area**
-  Inundated Boundary Lines
-  Approximated
-  416 Foot Elevation
-  426 Foot Elevation
-  430 Foot Elevation



CHAPTER 11. LAND USE

The zoning regulations include provisions for site plan review by the planning commission, conditional use review by the town or village board of adjustment, and sign regulations, including related sign design standards. There is also an adopted flood hazard area overlay district, which is required for municipal participation in the National Flood Insurance Program (NFIP). In 2000, the zoning was amended to include telecommunications facility provisions. The Planning Commission proposed downtown design regulations and associated guidelines in 2001 to meet planning requirements for downtown designation, but these were tabled by the Village Trustees.

At present, Waterbury does not have separate subdivision regulations. The subdivision of land is reviewed to a limited extent under site plan review, and related planned residential and planned unit development (PRD and PUD) provisions.

11.5 “Smart Growth” for Waterbury

In November, 2000 the Waterbury Planning Commission completed a community assessment tool developed by the Vermont Forum on Sprawl (VFOS) called the “Vermont Smart Growth Scorecard”. This assessment evaluates the impact of “sprawl” within communities. As defined by the VFOS, “sprawl” is characterized by low density development outside compact urban and village centers, along highways and in rural countryside. Some tell-tale features of sprawl include large lot developments, low average densities, large paved areas, fragmented open spaces, separation of uses into distinct areas, and the necessity of automobile-travel to meet basic needs. “Smart Growth” is an antidote to sprawl and seeks to preserve compact settlement patterns, encourage mixed-use development, preserve working land as well as historic and cultural facilities, offer choices in both housing and transportation, and involve citizens in the deciding the community’s future. Results of the Smart Growth Scorecard demonstrated that the assets of Waterbury village, with a mix of uses (commercial, residential, industrial and institutional) contribute to the town’s “smart growth” development patterns. However, the town’s current growth pattern, which is dominated by low density, scattered development, suggest that sprawl is becoming a problem in Waterbury, particularly along the Route 100 corridor.

11.6 Future Land Use Plan

Overview. The general goal of the Land Use Plan is to direct growth into areas most appropriate for development. The object is not to prevent growth but rather to encourage “infill” development within currently developed areas and to support additional development in areas identified as “Growth Centers.” This will allow the outlying areas to retain their general rural quality and functions while accommodating an appropriate quantity, quality and lower density of residential development. The overall approach of the Land Use Plan is to concentrate the higher density, intense uses – commercial, industrial, institutional, and high density residential - in two growth centers in the future: Waterbury Village and Waterbury Center village.

This Land Use Plan is a conceptual plan for how future growth in Waterbury should be managed. The Future Land Use Maps 5-2A and 5-2B are not Zoning Maps, or a substitute for the Zoning Maps in the Waterbury Zoning Regulations, and should not be interpreted as such. Even though the Town and Village Zoning Maps have been used in the past in the place of proper Future Land Use Maps in the Municipal Plan, the Future Land Use Maps in this Plan are representational of the existing and desired future land use patterns. Each Land Use Area shown on the Future Land Use Maps includes various Zoning Districts and the Areas are intended to represent broad land use categories that include a variety of minimum lot sizes and appropriate uses.

CHAPTER 11. LAND USE

A key to developing a future Land Use Plan lies in an understanding of the traditional and current settlement patterns in our community. A casual tour of the community reveals a variety of activities that can be broadly grouped into five land use categories, and a review of the current zoning map confirms this. From further review emerge those areas where concentrated development appears most appropriate. The Plan developed here follows, in many respects, the historic settlement patterns in Waterbury. The historic village areas of Waterbury Village include Main Street and Stowe Street, Pilgrim Park, Mill Village and Colbyville. The historic areas of Waterbury Center Village include the area along Route 100 near Cold Hollow Cider Mill and Waterbury Center Common. These two growth centers encompass most of the existing commercial, industrial, institutional, and higher density residential uses, as they have in the past. Their designation as growth centers is an “overlay” on the zoning in those areas, and is an expression of the community’s desire to make the fullest possible and appropriate use of them, to both promote economic growth and protect the rural nature of the outlying districts.

One of the overarching goals of Vermont’s Municipal and Regional Planning and Development law is “to plan development so as to maintain the historic settlement pattern of compact village and urban centers separated by rural countryside.” [VSA24 §4302(c)(1)]. State policy developed by both the Agency of Natural Resources and the Agency of Commerce and Community Development encourages future growth within existing or new “growth centers”. A “growth center” as defined by the state, is designed for and characterized by:

- A mixture of uses,
- A density that is higher than that found in other parts of the community,
- A circulation system that is conducive to pedestrian and other non-vehicular travel and that supports public transit,
- A design that includes public spaces which promote social interaction,
- A distinct organization around central places or focal points, and
- A pattern and scale of development that reflects traditional patterns of compact villages and urban areas separated by open countryside and appropriate to the growth center’s purpose.”¹

The State has identified four types of growth centers: downtowns and the residential neighborhoods that serve them, traditional town centers, new or emerging growth centers, and existing and proposed industrial parks.² Waterbury Village and Waterbury Center Village certainly fit within one or another of these categories.

The Planning Commission recognizes that not all of the areas within the two designated growth centers are currently suitable for intensive development. Without enhancements to pedestrian and vehicular access, Route 100 will be unable to support compact settlement patterns, walking communities, and mixed-use development – the touchstones of “smart growth.”

The 1999 Transportation Study conducted by the Central Vermont Regional Planning Commission identified a number of potential solutions to the problems of pedestrian and vehicular access along Route 100. The proposed projects for the Route 100 area include the construction of a new town road running parallel to Route 100 from Guptil Road to Lincoln Street, traffic-calming elements at the intersection of Laurel Road and Route 100, sidewalk and pedestrian crossings at the Blush Hill intersection, narrower roadways at the I-89 interchange, and the use of roundabouts. (Copies of the 1999 Transportation Study are available at the Waterbury Municipal Offices.)

¹ State of Vermont HUD Consolidated Plan 2000-2004.

² Agency of Natural Resources: Growth Center and Growth Management Guidance Document (2002)

CHAPTER 11. LAND USE

In the absence of infrastructure improvements for pedestrian and vehicular traffic, further development along Route 100 would exacerbate the conditions already identified in the 1999 Transportation Study: the deterioration of village character, severe backups, heavy traffic volume, rushed traffic, and unsafe pedestrian and vehicular conditions.

Land Use Areas. Five land use areas are identified on the Land Use Maps (see Maps 5-2A, 5-2B). Growth and development in the future can be healthy for our community as long as it is appropriate for the given land use area. Future development should be limited to densities and uses that are in keeping with the identity of these areas and should be of a scale that is consistent with community goals.

The land use areas as shown on the Land Use Maps are as follows:

- Mixed Use – Commercial/Industrial/Institutional/Higher Density Residential
- Village Residential
- Route 100
- Rural Residential/Agricultural
- Agricultural/Forestry/Conservation

The Village Overlay Areas/Growth Centers are shown including the higher density land use areas 1 and 2. One overlay encompasses Waterbury Village and the other includes Waterbury Center Village. A more detailed description of these areas, including the Village Overlay follows:

1. **Mixed Use – Commercial/Industrial/Institutional/Higher Density Residential Area.**

A. **Physical characteristics and boundaries**

This mixed-use area includes all the industrially zoned property in the Village and the Town including Pilgrim Industrial Park, the Demerit Place industrial area owned by Grenier Land Co., and the area around the flea market on Route 2, Bolton Rd. The mixed use area also includes the State Office Complex, the commercial and mixed residential areas of the Village of Waterbury, most of Colbyville, the Ben & Jerry's site, and the commercial areas in Waterbury Center Village including the Cold Hollow Cider Mill and the area around the triangular town green. These areas are located entirely within the designated Village Growth Centers and are shown on the Proposed Land Use Plan.

B. **Current land uses, trends, problems/issues**

The land uses in the mixed-use area reflect the fact that Waterbury is a regional employment center with a wide variety of uses ranging from general industry to light industry, offices, small scale retail, and other commercial uses. Some of the industrial areas, such as Pilgrim Industrial Park and the flea market area, have room left for a significant amount of development. There are also other opportunities for new commercial development and re-development in Colbyville and infill sites in Waterbury and Waterbury Center Villages.

The trend in the foreseeable future is for a variety of new development and re-development in these mixed-use areas to provide employment, shopping, and recreational opportunities. The anticipated challenges will include how to relieve and help prevent traffic congestion that may result from local and regional development and tourism activity, and how to address access management along Route 100, particularly in Colbyville and Waterbury Center Village. Accommodating pedestrian activity in these areas is an increasingly important challenge.

C. Desired Future Conditions

It is essential for Waterbury to retain and support its existing employers and to enhance the associated mixture of land uses that these anchor employers generate. Retaining Waterbury's major employers such as Green Mountain Coffee Roasters, Ben & Jerry's, and the State Office Complex is critical to the future of our community. It is also desirable to keep these and future large employers, as well as the many existing and future smaller businesses, located within the Mixed Use Areas and to support new compact development as infill within the Mixed Use Areas as well.

D. Recommended Strategies

- Encourage additional mixed uses, including residential growth, in the mixed use areas of Industrial Park, Colbyville, and Waterbury Center.
- Encourage higher density development in the designated Mixed Use Areas.
- Retain civic buildings and uses within the Village Growth Centers.
- Develop a strategy for extensions to the public water and sewer system consistent with the goals, objectives, and actions identified in the Chapter 9.
- Provide continued financial incentives for development within the Village Growth Centers.
- Promote multi-modal transportation in the Mixed Use Areas including the provision and maintenance of adequate pedestrian and bike facilities.

2. Village Residential Area

A. Physical characteristics and boundaries

These areas are located within the Villages of Waterbury and Waterbury Center. They are characterized as almost exclusively residential areas with a combination of one-, two-, and multi-family dwellings in the Village of Waterbury, and primarily one-family dwellings in the Village of Waterbury Center.

B. Current land use trends, problems/issues

These residential areas include several historic buildings, especially in the Village of Waterbury, where the majority of the houses are more than 50 years old. In Waterbury village lot sizes are typically small, generally ranging from one-quarter to one acre in size, while in Waterbury Center lots range from one-quarter to five acre and larger. These areas are supported by public sewer in the Village of Waterbury and on-site systems in Waterbury Center.

C. Desired future conditions

These Village Residential Areas are in the Growth Centers Overlays and higher density is desirable. Availability of public sewer and water within the Village of Waterbury will continue to facilitate compact development, while the lot sizes in Waterbury Center will continue, in most areas, to be larger due to the limitations of soils and on-site septic. Higher densities in some of these areas may be considered to support compact development where possible and appropriate. Any extensions of the higher density residential development outside of the designated Growth Centers Area should be reviewed for conformance with the Municipal Plan.

D. Recommended strategies

- Allow for infill development in these areas as appropriate and compatible with the surrounding development and the natural constraints of the area.

- Encourage the addition of accessory apartments or additional units on individual lots as allowed by the zoning regulations.
- Encourage the use of shared septic systems and new on-site systems in the area within the Waterbury Center Village as a way to facilitate higher density.

3. Route 100 Area

A. Physical characteristics and boundaries

This area follows both the east and west side of Route 100 from Colbyville to Waterbury Center Village, and then from Waterbury Center Village to the Stowe-Waterbury town line. The area is generally accessible directly from Route 100. The area includes pockets of existing commercial and residential development as well as a significant amount of agricultural and forested land, scenic open areas with vistas of the mountains, and natural areas such as wetlands, streams, and ponds. Route 100 is a state road that is heavily used by people going to and from work, tourists, commercial vehicles, and local traffic.

B. Current land use trends, problems/issues

The Route 100 area continues to experience significant development pressure in part because it is a highly traveled route with existing tourist attractions such as the Stowe Mountain Resort, Ben & Jerry's, Cold Hollow Cider Mill, and other shops and businesses. The entire Route 100 area is experiencing both commercial and residential development pressure. Regional growth and development adds growth pressures as well.

Fortunately development along Route 100 is currently focused in a number of nodes separated by open space and some of the most scenic vistas in the state. Two of the key issues in the Route 100 area, already identified and addressed to some extent in the zoning regulations, are preservation of important open space and clustering development in appropriate areas, as well as limiting road access/curb cuts off Route 100 for proposed and existing development.

C. Desired future conditions

- Preserve/conservate key open spaces and scenic vistas along Route 100.
- Allow for future development in nodes or concentrated areas without compromising the quality of the natural and rural quality of the landscape.
- Limit access for development to retain the ability of Route 100 to carry through-traffic and help prevent strip development with multiple access points.
- Allow for and support development with pedestrian amenities to reduce required automobile traveled.

D. Recommended strategies

- Review and amend the current zoning regulations to encourage the appropriate clustering of development and the preservation of open space in conjunction with the development.
- Work with landowners and citizen groups to conserve scenic and sensitive natural areas along Route 100.
- Work closely with the Vermont Agency of Transportation to limit access points on Route 100 for proposed and existing development.
- Create a "master plan" of the Route 100 area with landowner involvement that would include an inventory of the existing natural and scenic lands, designation of expanded and proposed development nodes, and preferred development scenarios for growth nodes.

1927



Source: Waterbury
Office Complex
Feasibility Study,
Freeman French
Freeman, 2012

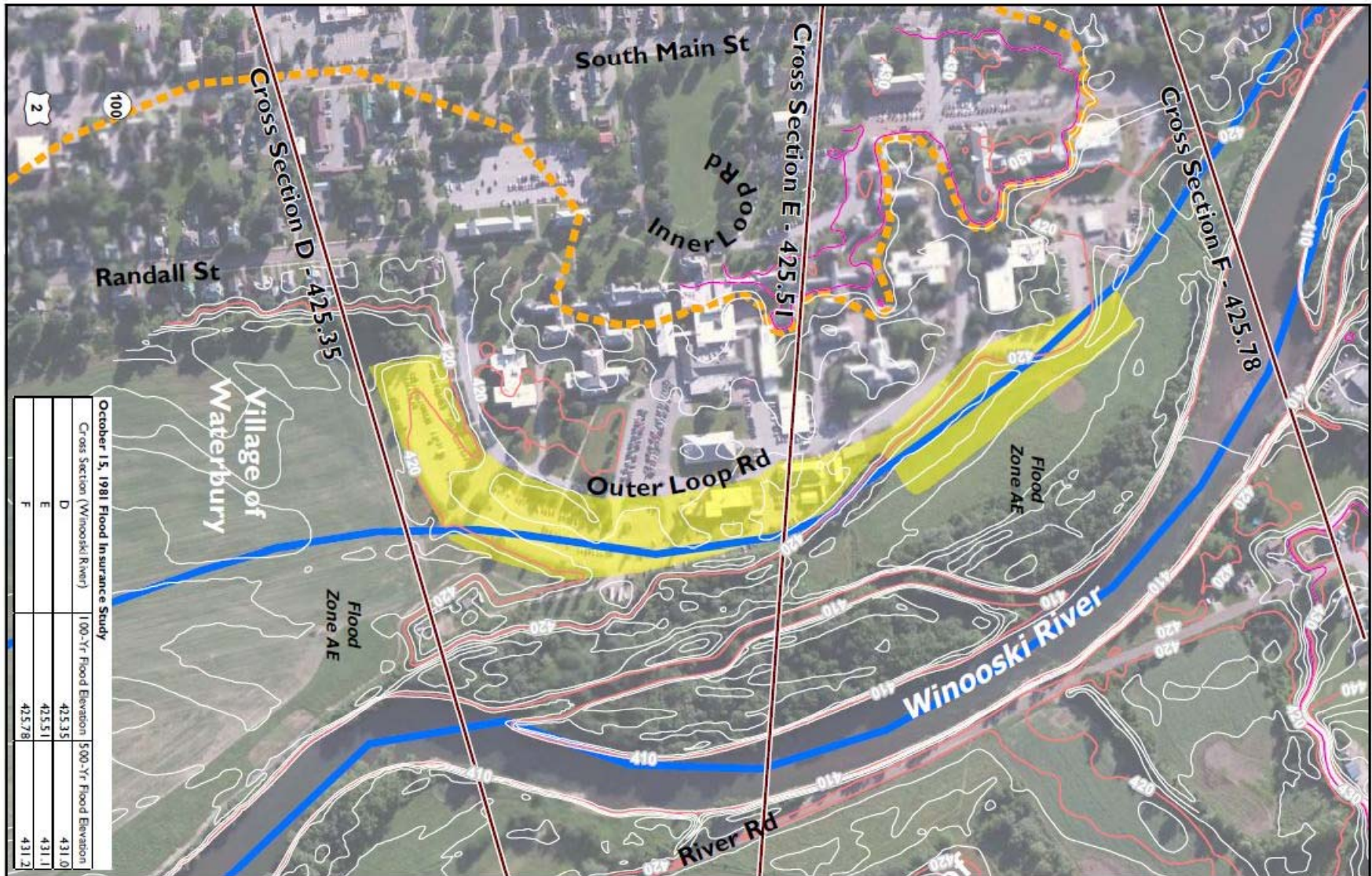


(09-877B-8)(11-12-27-10A)(R-5066) WATERBURY, VT



WCAX
3
2011

Floodway Analysis



October 15, 1981 Flood Insurance Study

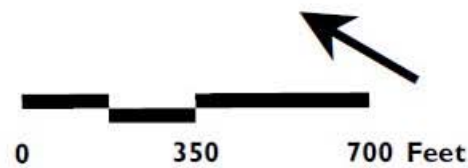
Cross Section (Winooski River)	100-Yr Flood Elevation	500-Yr Flood Elevation
D	425.35	431.0
E	425.51	431.1
F	425.78	431.2

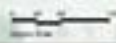
Legend

- 10' Index Contour
- 2' Contour Interval
- Contour Elevation = 428'
- Floodway
- 100-year floodplain
- Approximate Cross Section Location (From 10/15/81 Flood Insurance Study)
- Potential Flood Mitigation Areas

Existing Topographic Data

March 9, 2012
Waterbury, Vermont

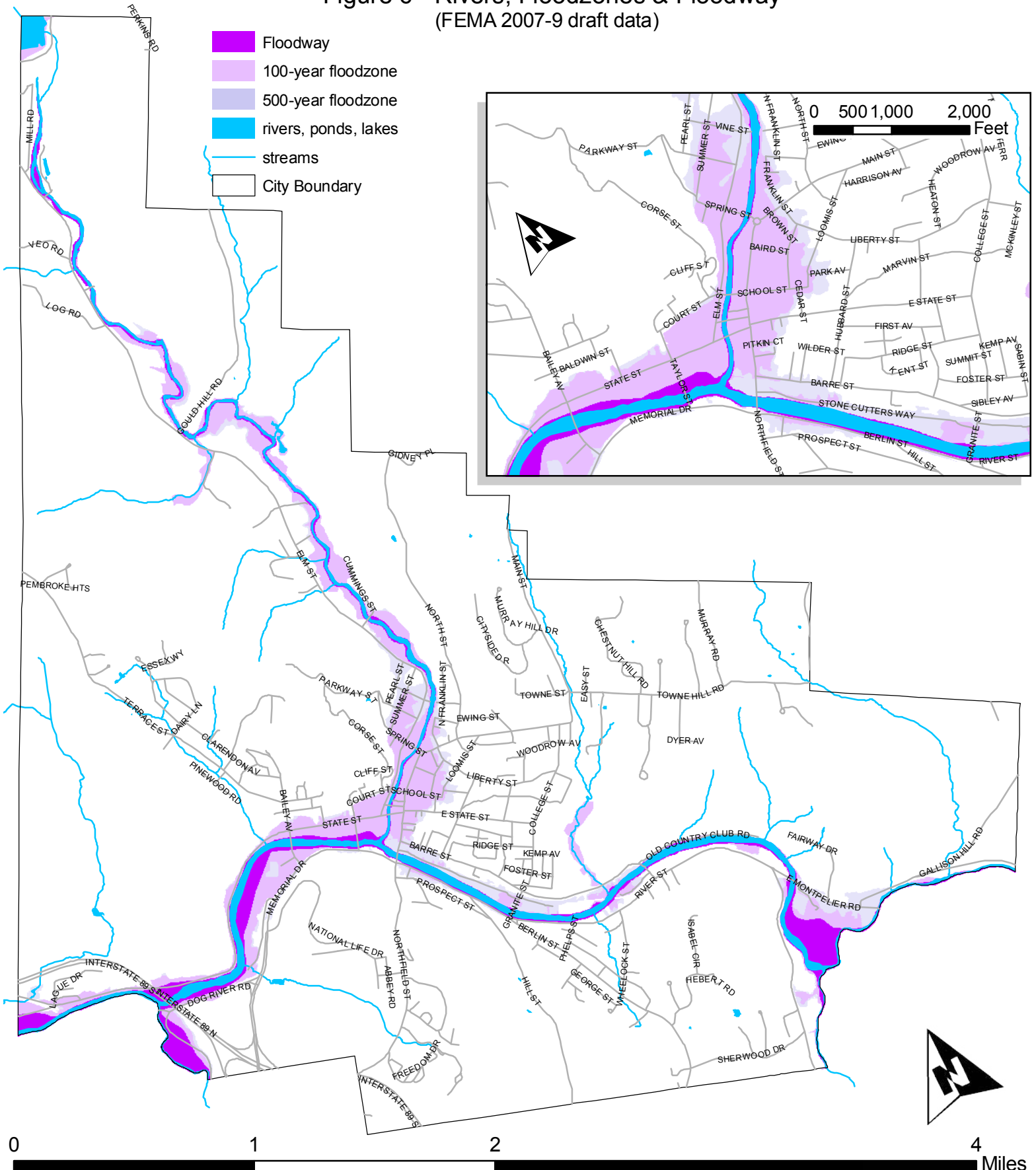




CITY OF MONTPELIER

2010 MASTER PLAN

Figure 6 - Rivers, Floodzones & Floodway
(FEMA 2007-9 draft data)



Montpelier Flood Hazard Mitigation Plan



City of Montpelier

Department of Planning and Development

July 1998

**Written in Cooperation with:
Federal Emergency Management Agency, Region I**

III. Flood Risks and Potential Damage

A. Floodplain

The flood plain in Montpelier is depicted in the Flood Insurance Rate Maps (FIRM) produced by the Federal Emergency Management Agency (FEMA) revised February 17, 1982 and in a report completed by the Soil Conservation Service in 1994. The flood plain is divided into two basic zones; Zone A or the 100 year flood plain, and Zone B or the 500 year flood plain. The 100 year flood plain is the area with a 1% chance of flooding in a given year while the 500 year flood plain is the area with a 0.2% chance of flooding in a given year.

The 100 year flood plain encompasses 478.6 acres or 7.2% of the entire city while the 500 year flood plain encompasses 86.5 acres or 1.3% of the entire city. Much of the land surrounding each of the city’s four rivers is located within the flood plain. In most areas, the flood plain consists of only a small area on either side of the river; however, in the downtown area near the confluence of the Winooski and North Branch Rivers the floodplain widens considerably. (Figure 3 Flood Plain Map)

B. Property and Structures at Risk

While the combined flood plains comprise only 8.5% of the total area of the city, this small percentage undervalues the impact that the flood plain has on the built environment of the city. The following statistics reveal the importance and impact of the flood plain on Montpelier’s built environment:

Property:

Number of properties in Montpelier	=	2794
Number of properties in 100 year flood plain	=	653 (23.4%)
Number of properties in 500 year flood plain	=	95 (3.4%)
Total properties in both flood plains	=	748 (26.8%)

Structures:

Number of structures in Montpelier	=	3350
Number of structures in 100 year flood plain	=	568 (17%)
Number of structures in 500 year flood plain	=	150 (4.5%)
Total structures in both flood plains	=	728 (21.5%)

Assessed Value (Sept. 97):

Total Assessed Value in Montpelier*	=	409,567,759
Assessed Value in 100 year flood plain*	=	104,968,100 (25.6%)
Assessed Value in 500 year flood plain*	=	47,496,500 (11.6%)

Total Assessed Value in both flood plains* = 152,464,600 (37.2%)

*Government owned and other tax-exempt properties are represented in these figures.

Table 1. Land Area in Floodplain by Zoning District

Zoning District	Acres in Zoning District	Acres in 100 yr Flood Plain	% in Flood Plain	Acres in 500 yr Flood Plain	% in Flood Plain	Total % in Flood Plain
Low Density Residential (LDR)	3191.73	59.45	1.86%	7.45	0.23%	2.06%
Medium Density Residential (MDR)	2048.83	82.21	4.01	17.17	0.84	4.85
High Density Residential (HDR)	223.23	38.43	17.3	15.57	6.97	24.0
Central Business I (CB-I)	48.81	40.08	82.11	1.10	2.25	84.36
Central Business II (CB-II)	73.67	30.96	42.02	3.8	5.16	47.18
Civic (CIV)	35.42	19.15	54.06	1.62	4.57	58.63
General Business (GB)	320.58	135.64	42.31	23.74	7.41	49.72
Industrial (IND)	172.00	62.44	36.30	13.63	7.92	44.22
Cemetery (CEM)	21.97	--	0.00	0.20	0.91	0.91
Recreation (REC)	184.15	9.10	4.94	0.35	0.19	5.13
Office Park (OP)	275.54	1.16	0.42	1.82	0.66	1.08
Total	6595.93	478.62		86.45		

Source: *City of Montpelier Geographic Information System and property data*

While the total area of both flood plains accounts for only 8.5% of the city its effect on the property, structures and value of the city’s real estate is much greater. Nearly 27% of the city’s individual properties are at least partially within the flood plain while 21.5% of all of the city’s structures are found within the flood plain. More significant is the percentage of the city’s total assessed value which is located within this small area of the city. Over 37% of the city’s total assessed value is found within the flood plain since most of the city’s commercial properties are located in the downtown or along Barre Street or Berlin/River Street, much of which are within the flood plain. This is shown in the breakdown of the flood plain by zoning district which indicates that 51.1% of the city’s five commercial zoning districts is within the combined 100 and 500 year flood plain. While no numbers exist to measure the amount of infrastructure that exists in the flood plain, it is considerable compared to the city as a whole since the flood plain encompasses the most developed areas of the city (Table 1).

While the potential damage to be incurred by the city if a major flood happens is significant, the

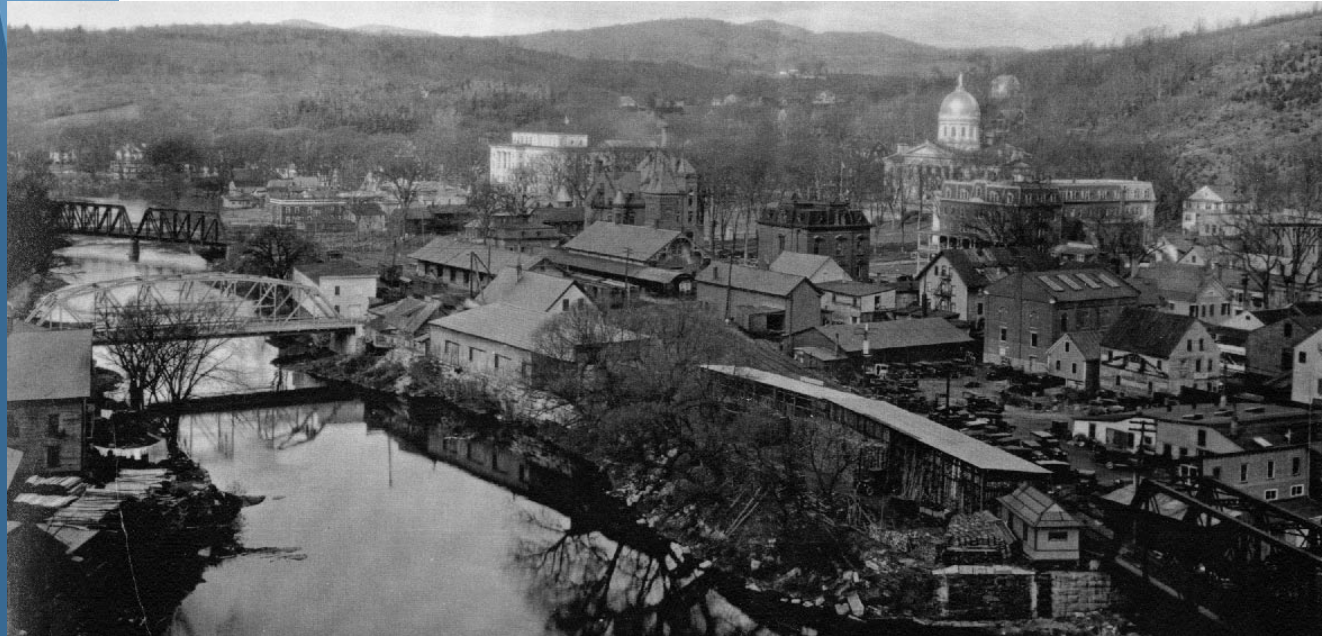
number of property owners who have flood insurance policies is surprisingly low. According to FEMA, of the 653 properties within the 100 year flood plain there are only 224 flood insurance policies for the entire city.. The 224 policies account for \$20,302,600 in total flood insurance. The National Flood Insurance Program has paid out a total of \$1,520,731 from 12 3 claims.

C. Heart of Montpelier

While the impact of the flood plain is easily assessed in terms of the number of potential structures and properties at risk, it is difficult to assess the emotional impact that a potential flood may have on the city. The key areas of the city, the Capitol Complex and the downtown are located almost entirely within the flood plain. These two areas are the focus of the city's residents and provide the identity of Montpelier. Other important elements of the city found within the flood plain is City Hall and most of the properties on the National Register of Historic Places. Tremendous historic resources are located within the flood plain and are at risk of being damaged in a flood.

Capital District Master Plan

Montpelier, Vermont 2000



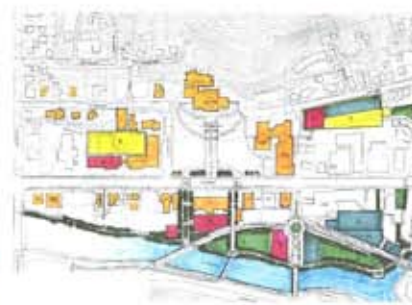
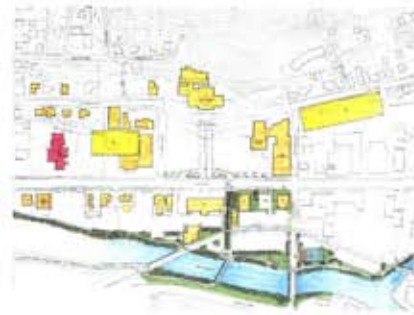
For **The City/State Commission**

Gossens Bachman, Architects

By **The Office of Robert A. White, Landscape Architects**

Louis Berger and Associates, Transportation Consultant

Five Master Plan Options



1. Status Quo - Minimal new building:

New State Offices are accomplished primarily through the acquisition of buildings in or near the current Capital District. The State will buy currently leased space in National Life, the Union Mutual and other buildings, lands adjacent to the Capital District, and renovates them to suit state offices. Existing Capital District lands are land banked, while parking and the river frontage are aesthetically improved for the greenway. Many, but not all, of the existing surface parking spaces are retained or reorganized. Parking displaced by the greenway will be located in structures on Court Street or behind 133 State Street.

2. Downtown Linkages :

Existing downtown buildings are used to partially serve the state building space needs, requiring less space to be built in the Capital District. Greenspace is maximized with less building coverage, and parking for both the downtown and the Capital District is distributed through a series of shared surface and structured lots. Part of the link includes a new street facing the riverfront with new private development opportunities to benefit the city's economic vitality.

3. River Connections:

New buildings are developed along State Street to fill existing "gaps", preserving the continuity of the historic streetscape. In contrast to the built-up street is a continuous park established along the river which integrates a new Capital District and Downtown Montpelier Transit/Gateway Center.

4. Alternative Street Connection - Riverfront Revitalization:

The Downtown and the Capital District are connected with a new road from Main/Barre Street to Taylor Street paralleling the WCRR line. New private development is located along this street requiring the removal of the former VTLCT building and M&M beverage. New buildings match the scale of Main Street in a series of commercial blocks and storefronts, all facing a large riverfront park. State buildings are accomplished with new construction on Taylor Street and additions to both 120 and 133 State Street. Additional state office space is available on Court Street above the parking structure.

5. Maximize Green Space:

The central feature of this plan is the removal of the 120 State Street building and the extension of the State House Lawn to the river. New buildings frame the green on both sides and additional buildings are added to 133 State Street, next to and across Gov. Davis Blvd from the Pavilion. Displaced parking is located to peripheral lots and structures on the back lots.



- EXISTING BUILDINGS
- NEW STATE OFFICES
- NEW PRIVATE DEVELOPMENT
- NEW TRANSIT/ VISITOR CENTER
- RELOCATED HISTORIC BAGGAGE BUILDING

Winooski River Greenway

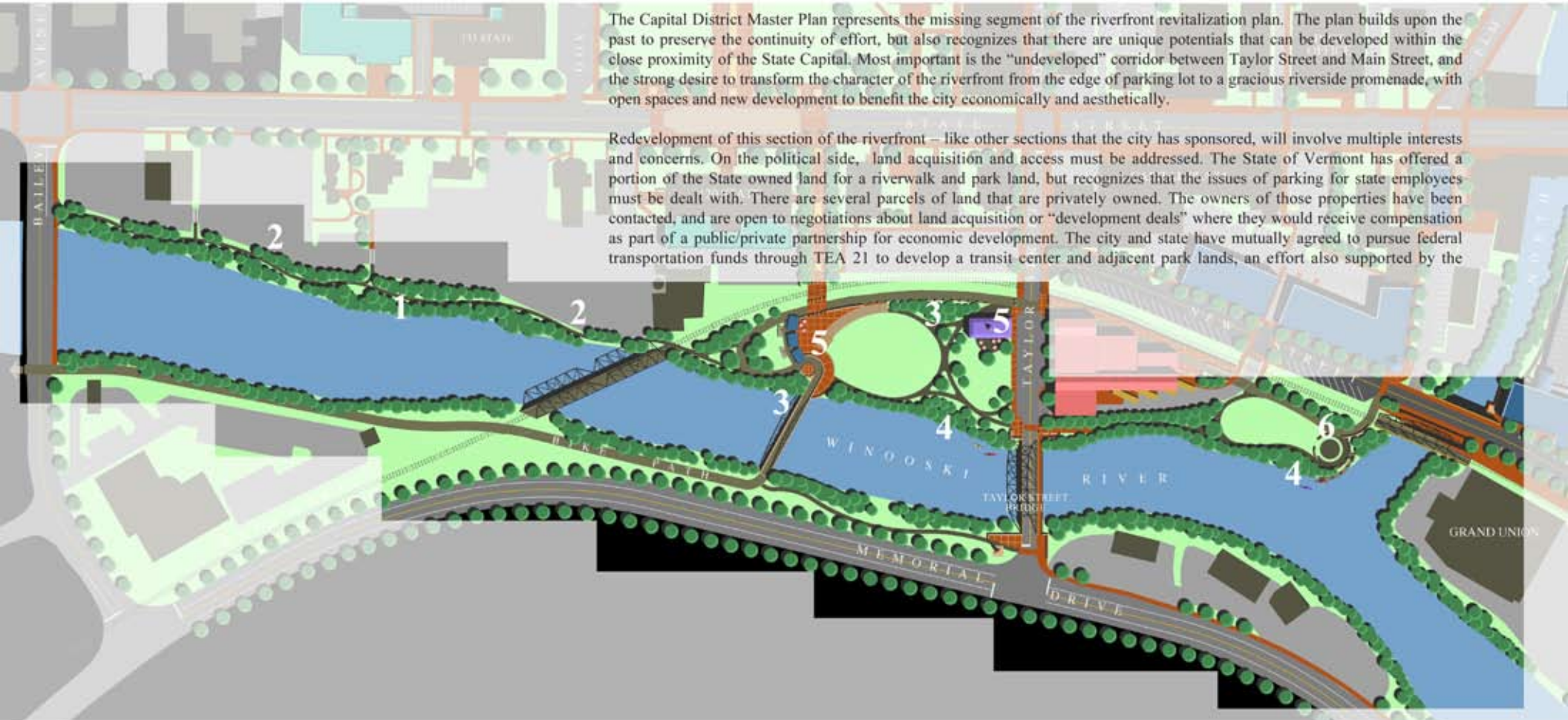
The River and the City: transformation of a corridor

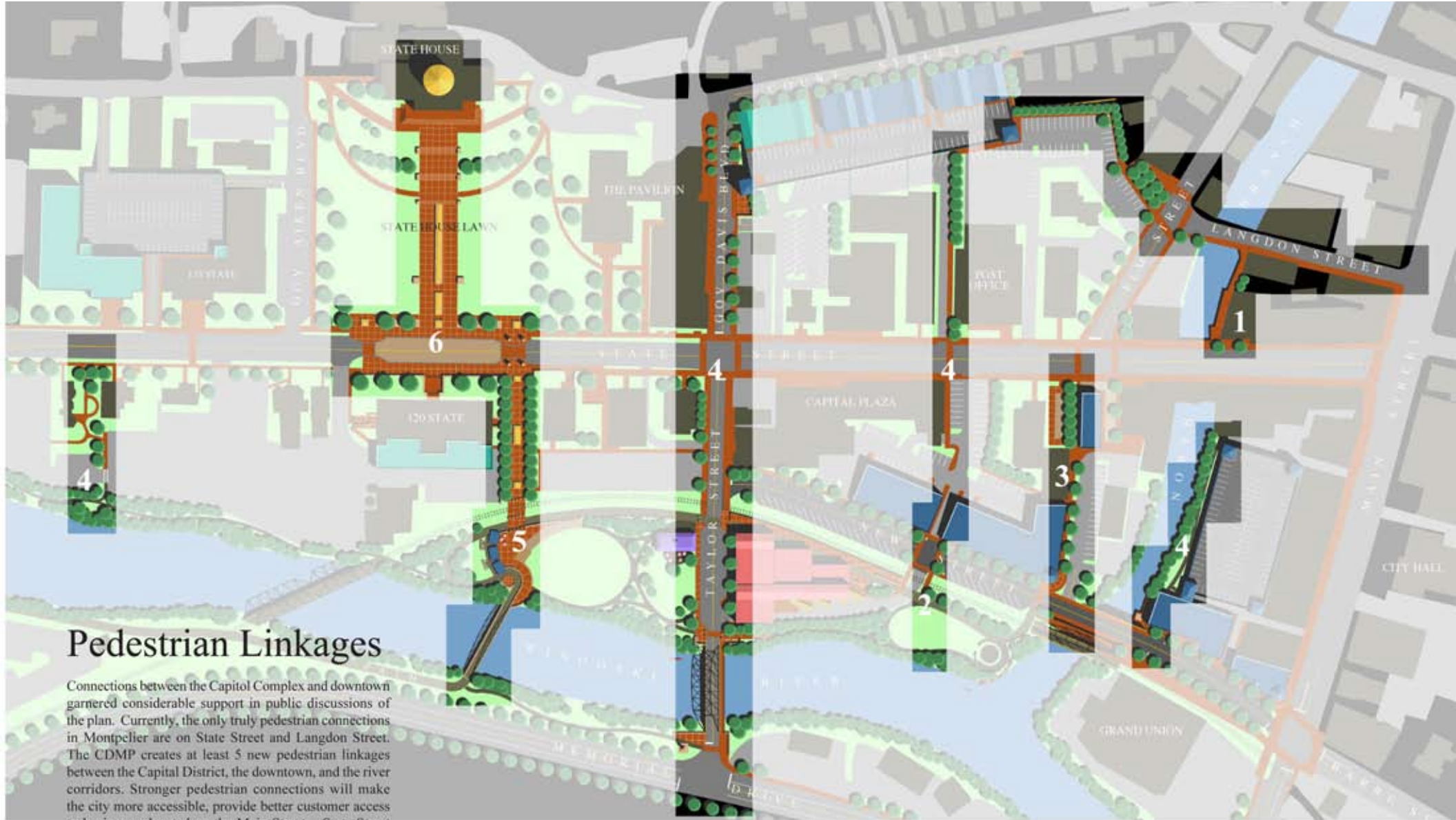
Whereas in the past, the Winooski River served as an industrial conduit, the waterpower, and waste disposal system for the city, recent years see a more complementary relationship. The river is now seen as a positive attraction, where clean water and an attractive riverbank is an essential element of the city's future economy and quality of life.

For almost 10 years, the city has been actively engaged in the planning and implementation of a riverfront improvement plan. River corridor improvements have been included in the City Master Plans, and separate design and planning efforts have resulted in construction of the Winooski West and Winooski East Bikepaths and improvement districts. The city-sponsored Montpelier Rivers Report and the River Visions plan have served as the inspiration for planning efforts, and helped to articulate the community's sentiments about the past, present and future for the river corridors in Montpelier.

The Capital District Master Plan represents the missing segment of the riverfront revitalization plan. The plan builds upon the past to preserve the continuity of effort, but also recognizes that there are unique potentials that can be developed within the close proximity of the State Capital. Most important is the "undeveloped" corridor between Taylor Street and Main Street, and the strong desire to transform the character of the riverfront from the edge of parking lot to a gracious riverside promenade, with open spaces and new development to benefit the city economically and aesthetically.

Redevelopment of this section of the riverfront – like other sections that the city has sponsored, will involve multiple interests and concerns. On the political side, land acquisition and access must be addressed. The State of Vermont has offered a portion of the State owned land for a riverwalk and park land, but recognizes that the issues of parking for state employees must be dealt with. There are several parcels of land that are privately owned. The owners of those properties have been contacted, and are open to negotiations about land acquisition or "development deals" where they would receive compensation as part of a public/private partnership for economic development. The city and state have mutually agreed to pursue federal transportation funds through TEA 21 to develop a transit center and adjacent park lands, an effort also supported by the





Pedestrian Linkages

Connections between the Capitol Complex and downtown garnered considerable support in public discussions of the plan. Currently, the only truly pedestrian connections in Montpelier are on State Street and Langdon Street. The CDMP creates at least 5 new pedestrian linkages between the Capital District, the downtown, and the river corridors. Stronger pedestrian connections will make the city more accessible, provide better customer access to businesses located on the Main Street – State Street corridors, and will enable higher utilization of off-street public parking facilities.

Private Development

The Master Plan emphasizes a balance of open space and new development. Most of this occurs along a corridor that runs parallel to the Winooski River between Taylor Street and Main Street and turns upstream along the North Branch. This area of the city, formerly an industrial zone, is now a series of open, generally vacant lots, for parking and service uses. As part of the city's longtime desire to revitalize the riverfront a development framework specifically oriented to this corridor has been recommended.

The essential components to the redevelopment of the riverfront are to:

- Provide access to landlocked parcels through a new street connection.
- Provide pedestrian access as part of the "walkable" downtown with sidewalks and other pedestrian linkages.
- Orient new development to new streets and to the rivers.
- Provide parking on - street, and shared public parking to serve a whole riverfront revitalization district.
- Provide locations for new mixed - use buildings in an urban setting facing streets and sidewalks.
- Develop buildings that are economically viable while still compatible to the street's character.



District Energy

District energy is one element of the Capital District Master Plan. Like other Master Plan elements, it is a bridge for cooperation and mutual benefit between the State of Vermont and the City of Montpelier.

What is district energy?

District energy is the use of local energy resources to meet community needs. In Montpelier, the core concept is *district heating*: the use of a central heating plant to supply heat and hot water to many buildings throughout the community. When the system is fueled with locally produced waste wood it benefits the broader community and becomes a *community energy system*.

In a district energy system, buried hot water or steam pipes are used to distribute thermal energy from the central plant to the customers. Each subscriber pays only for the energy they use. The system functions much like a municipal water supply system. Most subscribers will no longer need to use their own heating plants and fuel storage tanks.

What is the existing Capital District plant?

The Capital District of state buildings in Montpelier has been served by a district heating system for over fifty years. The plant is located behind 120 State Street, and is recognized by its tall brick stack. In addition to state buildings, it also serves the new Chittenden Bank building.

The Capital District Plant has used wood chips for its main fuel for the last fifteen years. The wood chips can come from either of two sources:

- Chipped sawmill waste wood
- Low-grade wood chipped in the forest as harvest by product



RIV - Riverfront district: The Riverfront District defines the area along the Winooski River between Main, Granite, and the rear of Barre Streets. Minimum lot area is 5,000 square feet.

The steps Montpelier is taking to encourage infill development, adaptive reuse and/or re-development of vacant or under-utilized land within the designated downtown are as follows:

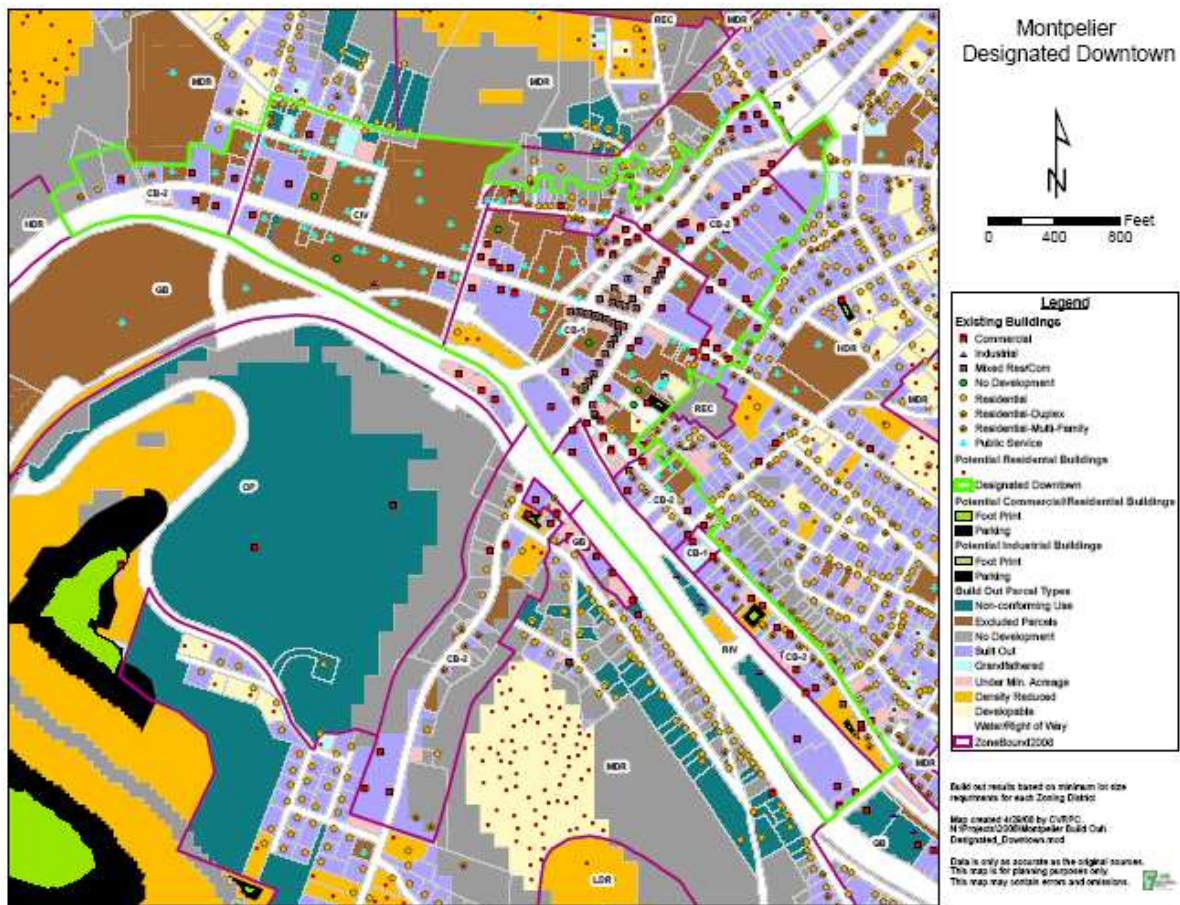
1. The creation of a Capital District Master Plan that will create linkages from the Capital District proper to the downtown; increased state office space; develop a greenway along the Winooski River; and create a Transit Center located at the intersection of the Winooski River and the Taylor Street Bridge.
2. Parking requirements are waived for redevelopment in CB1 and Riverfront districts.
3. Zoning Ordinance allows the Development Review Board to waive parking requirements for new development and allow greater flexibility for shared use parking in many areas of designated downtown.
4. The City encourages private development by identifying areas where future development could occur either as site-specific in-fill projects or larger redevelopment zones;
5. In the past 5 years, the city has taken a leadership role to prompt new development or acted in a supporting role to address needed policy changes. The recent plans for the Winooski East redevelopment, where the city has created a commission to oversee development planning and review of larger scale mixed-use development is a good example of city-state-private developer cooperation. The city recognizes that additional development in the downtown can be part of a positive future for the downtown economy, and if properly guided, can be a positive asset from the perspective of public interests, public space, economic well being, and environmental health. This position has a positive application to the City-State Master Plan.
6. Montpelier is planning to develop a Capitol Complex to relocate a number of state departments that are currently occupying isolated rental spaces outside the Capital District (CIV) but within the City of Montpelier. Currently, the State leases or rents 103,000 SF of office space. The State of Vermont, dedicated to the concept of concentrated growth rather than sprawl, would prefer to grow within the existing downtown. As a policy, the State intends to remain within the existing Capital Complex and not expand outside of these boundaries into other areas currently under private ownership.
7. The Capital District Master Plan state that “the retention of existing historic structures will be included in the CDMP for new State offices, particularly along State Street. New Buildings that face the Winooski River should have a “front” face to the south. Such development should be visually and programmatically “connected” to the riverfront area with public access along that corridor and Memorial Drive.”

Chapter Four: Development Patterns

Question 4.1

Discuss the character, land uses and density of development that currently exists and will be permitted on lands within the designated downtown, village center or new town center associated with the proposed growth center, specifically citing the steps the municipality is taking to encourage infill development, adaptive reuse and/or redevelopment of vacant or under-utilized land within the designated downtown or village center, or to promote development with a 'downtown' character within a new town center.

Montpelier's designated downtown is characterized by high density mixed use commercial/residential land uses. It is a traditional Vermont downtown that has served the Washington County region as a shopping and employment center for two centuries. It has also served the State of Vermont as the State Capitol for just as long. There are several hundred structures contributing to its historic district. The designated downtown has the highest density of land uses in the city. As shown in the attached designated downtown map there is a good mix of commercial, residential, and public buildings that are well integrated in a compact semi-grid pattern of walkable streets.



As described in question 1.1 above the designated downtown has very little room for in-fill development. There is approximately 65,000 commercial square feet of development potential remaining within this area. The city’s zoning regulation encourages the development of this remaining land since the potential lies within the city’s central business district zoning district. This district permits the highest density potential within the city. In addition these properties are within the design control district which ensures that these last remaining buildings are built to similar architectural standards as the existing buildings. The zoning regulations regarding the design control district state that the purposes of the district are to create:

- Harmony of exterior design with other properties in the district;
- Compatibility of proposed exterior materials with other properties in the district;
- Compatibility of the landscaping with the district;
- Prevention of the use of incompatible designs, buildings, color schemes, or exterior materials;

While these regulations help “encourage infill development” the majority of future development will occur outside of the designated downtown because of the degree to which the downtown is already built out.

The designated downtown includes four zoning districts. Three of the districts allow for mixed uses (Residential and Commercial), the fourth district (Civic) allows for only commercial uses. These are the most flexible of all of Montpelier’s zoning districts. They encourage development by allowing in-fill development and a mix of uses. A developer would only need one-eighth of an acre to build in two of the districts and approximately one-fifth to build in the other two.

Table 21: Zoning in Designated Downtown

DISTRICT	USE	Minimum Lot Size (acres)
Central Business 1 (CB1)	MixedRC	0.110
Central Business 2 (CB2)	MixedRC	0.230
Civic District (CIV)	Com	0.200
Riverfront (RIV)	MixedRC	0.110

Source: Montpelier’s Zoning Ordinance

CB-I- Central Business 1: The city's primary government and retail center. The district also permits multi-family housing. Minimum lot area is 5,000 square feet (1/8 acre).

CB-II- Central Business 2: A transitional district between the Civic and Central Business Districts. The district permits office and multi- family residences and other uses which would enable the preservation of the historic character of the areas where mapped. Minimum lot area is 10,000 square feet.

CIV -Civic District (Capital Complex): Office uses associated with the city's function as State Capital. Minimum lot area is 10,000 square feet.

Chapter Seven: Public Spaces

Question 7.1

7.1. Identify all existing or planned public spaces located within the proposed growth center and summarize the steps the municipality is taking to plan for, provide and/ or maintain public spaces, including open space and public recreation facilities, within the proposed growth center.

The Views and Vistas report for the City of Montpelier describes in detail the open space and scenic resources and how they should be preserved. The following are excerpts from the plan for the properties in or adjacent to the growth center.

B. Important Views

Five Montpelier Views ranked highest in the Views and Vistas Survey. They are noted below along with a description of important elements in the view.



▪ **River Views**

River views ranked very high among those surveyed.

At present bridges offer the best opportunities for viewing the Winooski River and North Branch. In some cases such as the Granite Street Bridge and Main Street Bridge, the statehouse becomes a focal point in the scene. The bridges offer a diverse range of views from the lovely waterfall from the pedestrian bridge by the Lane Shops, to highly urban views from the Langdon Street Bridge, to more open rural views along bridges off Elm Street. The views from State Street's Rialto Bridge looking toward Langdon Street and from Main Street Bridge both east and west were two of the favorites expressed in the survey.

Many sections of the river are difficult to see or get to; others are accessible but marred by visual clutter or eroding shorelines. The Taylor Street Bridge, an important downtown getaway, only has views of backs of buildings, utilities, and parking. A new multi-modal transit center is planned for the empty lot directly adjacent to the Taylor Street bridge, it incorporates a park and bike path that will allow greater access to the river view.

▪ **Sabin's Pasture**

Informal footpaths over Sabin's pasture behind Vermont College led to a high meadow with dramatic views of College Hall and the Statehouse dome with a backdrop of distant mountains. The view extends about 180°, with the view to the west being the most dramatic portion. To the south and west are several high open meadows that also contribute to the scene. The foreground meadow is important to the overall view.



13. The structure shall be constructed and placed on the building site so as to offer the minimum resistance to the flow of floodwaters.
14. The structure shall be firmly anchored to prevent flotation that may result in damage to other structures.
15. Service facilities such as electrical and heating equipment shall be elevated or flood-proofed.

Stormwater Management

Montpelier has made both regulatory and infrastructure investments in the control of stormwater over the last several years – the area within the growth center is especially important, given its proximity to two of the rivers that flow through town. Our stormwater standards are as follows:

723.STORM DRAINAGE

Storm sewer system and/or other drainage improvements shall be in accordance with plans approved by the Director of Public Works. In no case shall stormwater discharge into a city sewer system if a separate system exists.

723.A. Management Plan.

Where required by the Director of Public Works, a stormwater management plan must be submitted for review and approval by the Development Review Board. Stormwater control facilities must be designed to accommodate the 25 year storm event frequency or as required. All existing facilities for the conveyance of waters, both private and public, which may be affected or impacted by the development must be identified and analyzed. An historical account of off-site facilities within a drainage area (culverts, ditches and brooks, etc.) may also be required. The plan shall show all natural and constructed drainage ways, both existing and proposed.

723.B. Minimization of Stormwater Runoff.

The best available technology shall be used to minimize stormwater runoff, increase on-site infiltration, encourage natural filtration functions, simulate natural drainage systems, and minimize discharge of pollutants to ground and surface water. Best available technology may include measures such as retention basins, recharge trenches, swales and minimal use of impervious surfaces.

Stormwater drainage shall not negatively affect adjacent properties. Low points and standing water should be avoided unless specifically designed as in detention ponds, artificial wetlands, or similar facilities. Failure to maintain natural and/or engineered on-site systems as part of an approved development will be considered a violation of the permit.