Oak Grove Park
Mixed Use Feasibility Study
Medway, MA

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Chapter 1: Existing Conditions

Site Overview The project area (the Site) is a butterfly-shaped area located on the south side of Milford Street (Route 109) in Medway. The Site is bisected by Trotter Drive, which serves the Medway Industrial Park area south of the site. The Site is known as the Oak Grove Bottle Cap lots. The Bottle Cap lots derive their name from a 1920's marketing promotion by Clicquot Club, a now defunct soft drink manufacturer founded in nearby Millis, which awarded the parcels to customers with winning bottle caps.

The Site is approximately 44.47+/- acres, and is situated just southeast of the Route 495/Route 109 interchange in Milford. The site is separated by Trotter Drive with approximately 20.68 acres to the west and 23.79 acres to the east.

Previous evaluations of this area include the Density through Design study completed as a collaborative project by University of Massachusetts, Amherst students in Spring 2007, as well as an extensive review completed for the 2009 Medway Master Plan.

1.1 Site Features

1.1.1. Land Use

The Bottle Cap lots were part of a paper subdivision which predated the Subdivision Control Law, and streets and utilities were never constructed to serve the properties. The original area containing the Bottle Cap lots was larger than the Site currently under review, and reportedly consisted of over 1018 individual parcels, each approximately 1,600 sq. ft. in size (80' x 20'). The ownership of many of the lots has been consolidated over the years. The Town of Medway has been performing ongoing back title research on the ownership of the Bottle Cap lots. Based on the available information from the title research, as of June 21, 2012 provided by the Medway Assessor's office, approximately 365 of the original lots are owned by the Town of Medway. A private landowner, the Richard W. Williams family, has also assembled 376 parcels over the years. Together the Town and the Williams family control approximately 741 parcels or 73 percent of the original parcels. Of the estimated remaining 277 of the original Bottle Cap lots, 183 are owned by 27 identified private owners and 94 by owners yet to be identified.

Trotter Drive, which separates the site at its midpoint, was constructed off Milford Street through the Bottle Cap lots. Trotter Drive provides access to the adjacent Medway Industrial Park, including a large Cybex facility located south of the Site on the west side of Trotter Drive.

Opposite the Cybex property on the easterly side of Trotter Drive, there are two parcels situated between the Site and the road frontage. One of the parcels is owned by National Grid (formerly New England Power) and was originally acquired for a transmission line right of way. The transmission line has since been constructed elsewhere east of the site. The other is a panhandle strip of land which is part of a privately held lot which has most

of its land area on Alder Street to the south. While not part of the original Bottle Cap lots, these two land strips are of strategic significance and are considered in this Study.

Along Milford Street/Route 109 approximately eight structures with street-front access and approximately two small additional areas of development are set back from the road. There is one onsite structure along Trotter Drive. Otherwise, the Site is predominantly undeveloped with forested sections. See Figure 1-1 Site Locus and Figure 1-2: Aerial Overview:

In terms of adjacent land uses, a large wetland/swamp is situated to the west; commercial/industrial development to the south; and residential development to the east and north. Figure 1-3: Land Use depicts the land uses on and around the Site. The Milford/Medway town boundary is situated just west of the site. Further to the west in Milford, on the other side of the Route 495/Route 109 interchange, are a number of large scale shopping and commercial/industrial office parks.

1.1.2. Topography

The Site is relatively flat with a gently undulating topography and a 30-foot differential between elevations 245 and 275 feet above mean sea level. The Site's high points are in its interior, with the tendency to slope down to its edges. Figure 1-4 presents the Site contours. Topography is a factor in determining whether proposed development can be access public sewer without the need of ejector pumps or a pump station.

1.1.3. Geology

No subsurface investigation was performed as part of this study. Based on on-site observations there did not appear to be any shadows depth to bedrock which is further supported by the SCS Soil Classification.

1.1.4. Soils

Canton fine sandy loam soils are the predominant soil type on the Site. These soils are well drained and characterized by stones 10 to 24 inches in diameter covering up to 15 percent of the surface, and boulders more than 2 feet diameter covering up to 25 percent of the surface. Merrimac fine sandy loam soils occupy the northwest corner of the site. These soils are welled drained and suitable for development. Ridgebury fine sandy loam and Freetown muck soils are located in proximity to wetland areas at the southwest edge of the site and near the intersection of Milford and West Streets respectively. These soils are poorly drained and have a high water table. Figure 1-5 presents the soil conditions on the Site.

1.1.5. Vegetation

Available information indicates that the vegetation consists primarily of an upland canopy forest of mainly white and black oak in various stages of succession, along with a few stands of white pines. A wooded wetland resource area is located in the northeast portion of the site near the intersection of Milford and West Streets

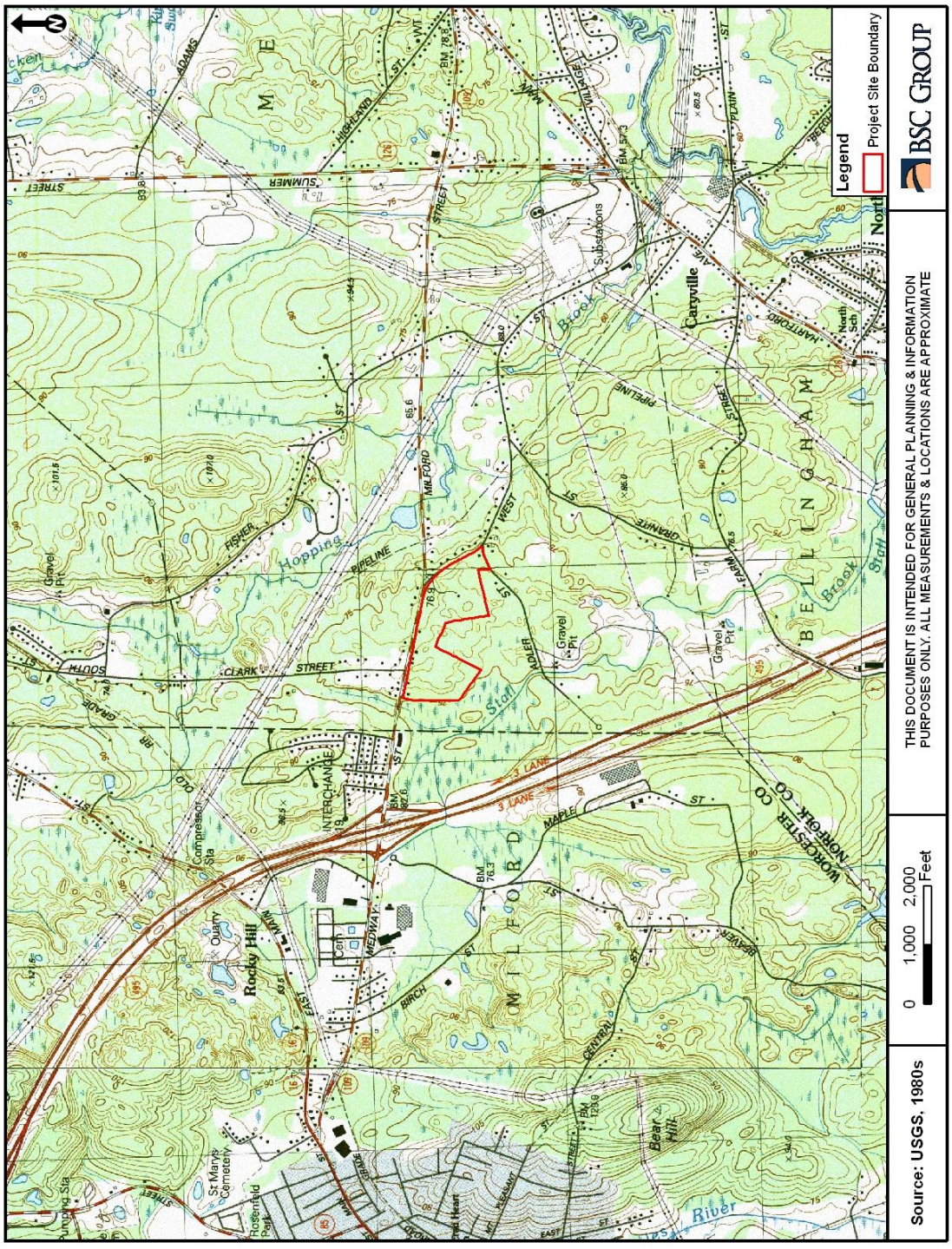


Figure 1-1: Site Locus

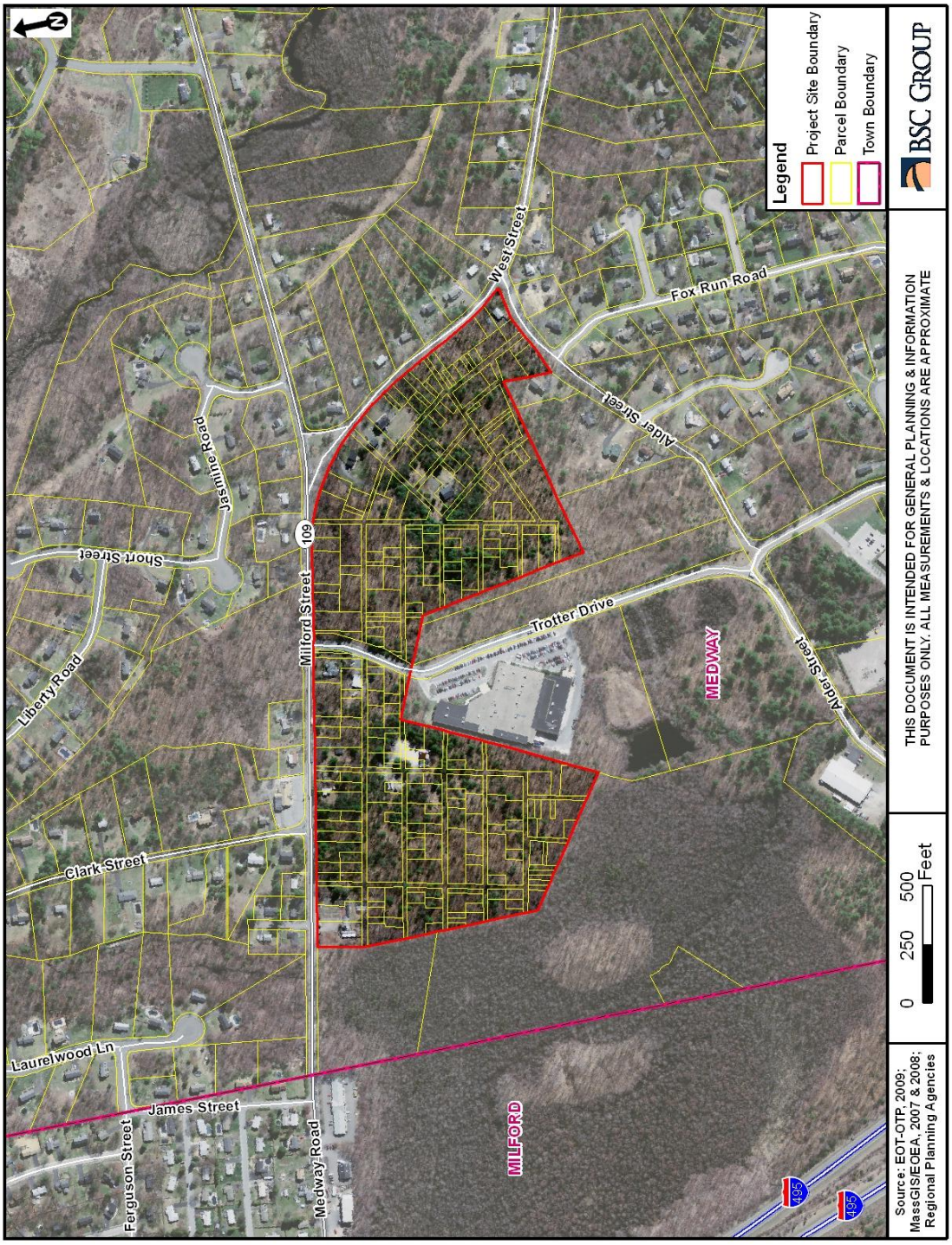


Figure 1-2: Aerial Overview

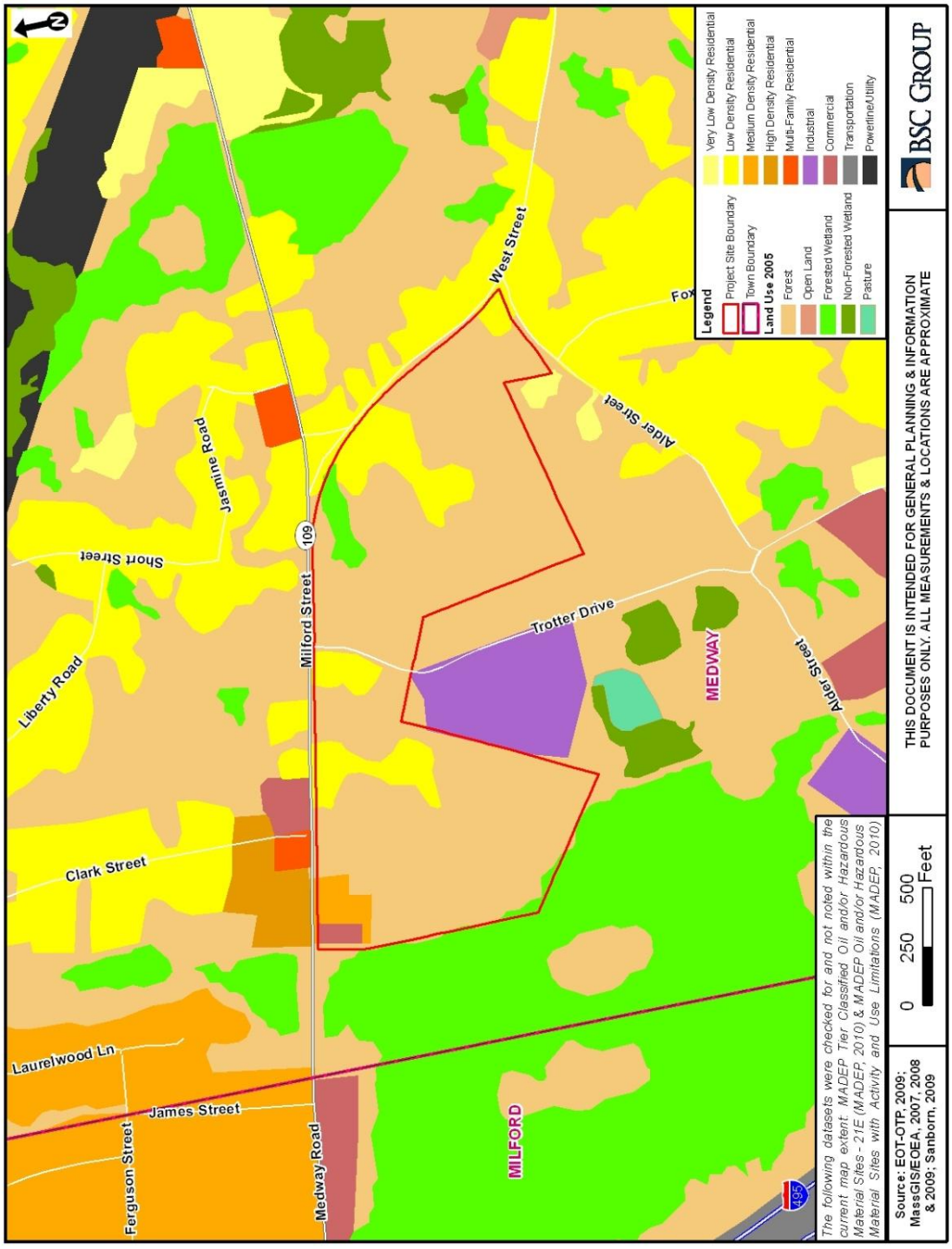


Figure 1-3: Land Use

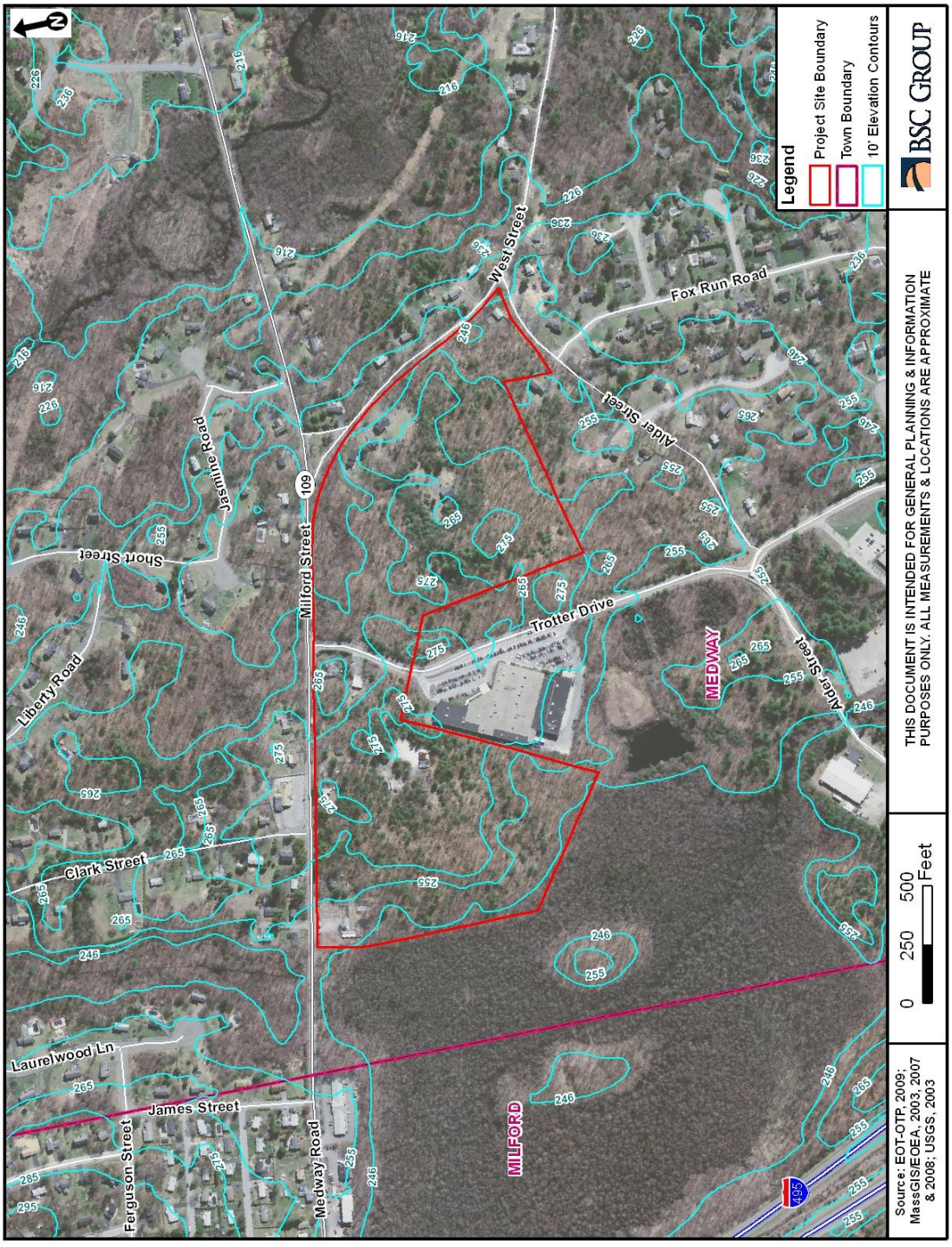


Figure 1-4: Topography

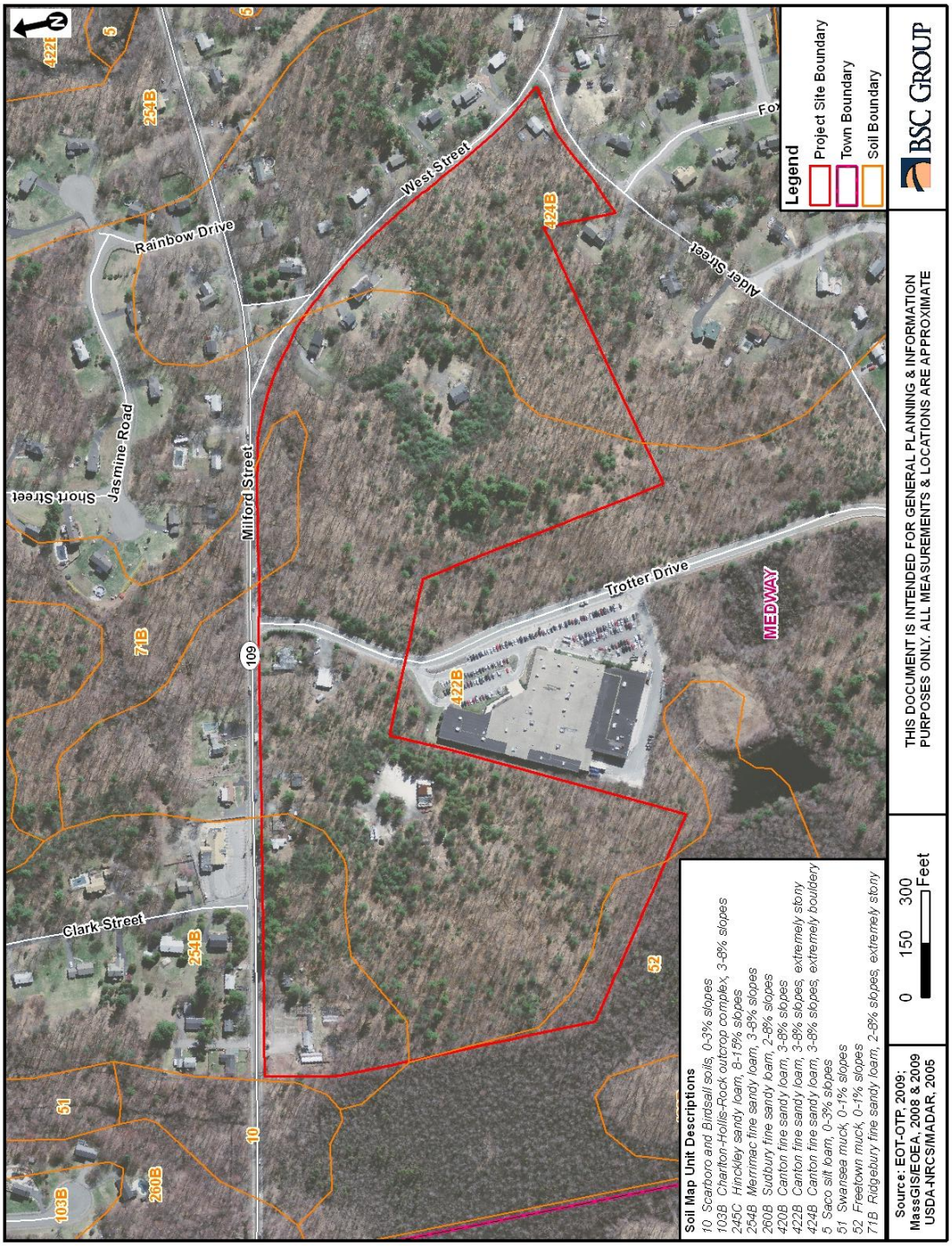


Figure 1-5: Soils

1.2 Environmental

1.2.1 Wetland Resource Areas

Based on Mass GIS data, a large wetland is situated to the west and south, which appears to slightly extend onto the Site's southwest corner. Additionally, there appears to be a wetland resource area in the northeast portion of the Site at the intersection of Milford Street (Route 109) and West Street. Figure 1-6: Wetland Resource Areas depicts these locations. There are no certified vernal pools (CVPs) or potential vernal pools (PVPs) identified on the Site by the Mass GIS database.

1.2.2 Natural Heritage and Endangered Species Program

According to the Mass GIS data layer for the Massachusetts Natural Heritage and Endangered Species Program (NHESP) no endangered species or estimated habitats are indentified within the Site. Additionally, the Site is not in or near an Area of Critical Environmental Concern (ACEC).

1.2.3 Floodplain

According to the National Flood Insurance Rate Map dated June 18, 1980, only a small portion of the southwest corner of the Site overlaps a 500-year Flood Boundary. It should be noted that this area is a contiguous to an area in the Town of Milford that is defined as a 100 year flood zone. FEMA appears to be addressing this inconsistency in the current revised preliminary FEMA Maps (dated July 27, 2010), where the designation has been changed to a 100-year Flood Boundary with a defined elevation of 246 feet. This preliminary draft revised boundary overlaps the western and southwestern Site boundary. To be conservative, this draft boundary, shown in Figure 1-7, is applied in this feasibility assessment

1.2.4 Hazardous Materials

A review of the Massachusetts Department of Environmental Protection on line data base reveals there are no records of Reportable Releases within the Site

1.2.5 Surface Water Resources

There are no know surface water resources present on the Site

1.2.6 Groundwater Resources

Approximately 15.84 acres of the western portion of the site is in a DEP Zone II Wellhead Protection associated with wells situated in the adjacent Town of Bellingham.

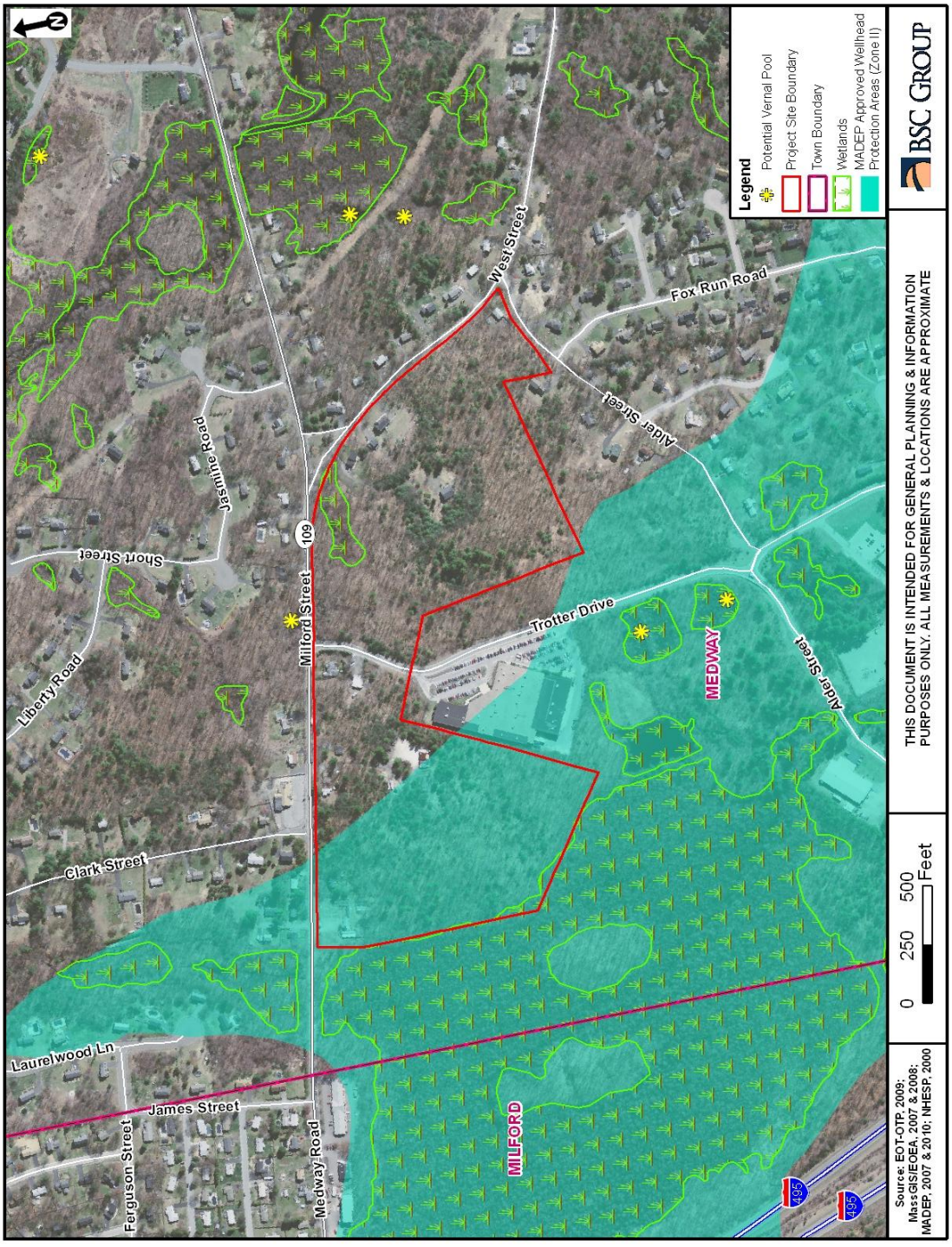


Figure 1-6: Wetland Resource Areas

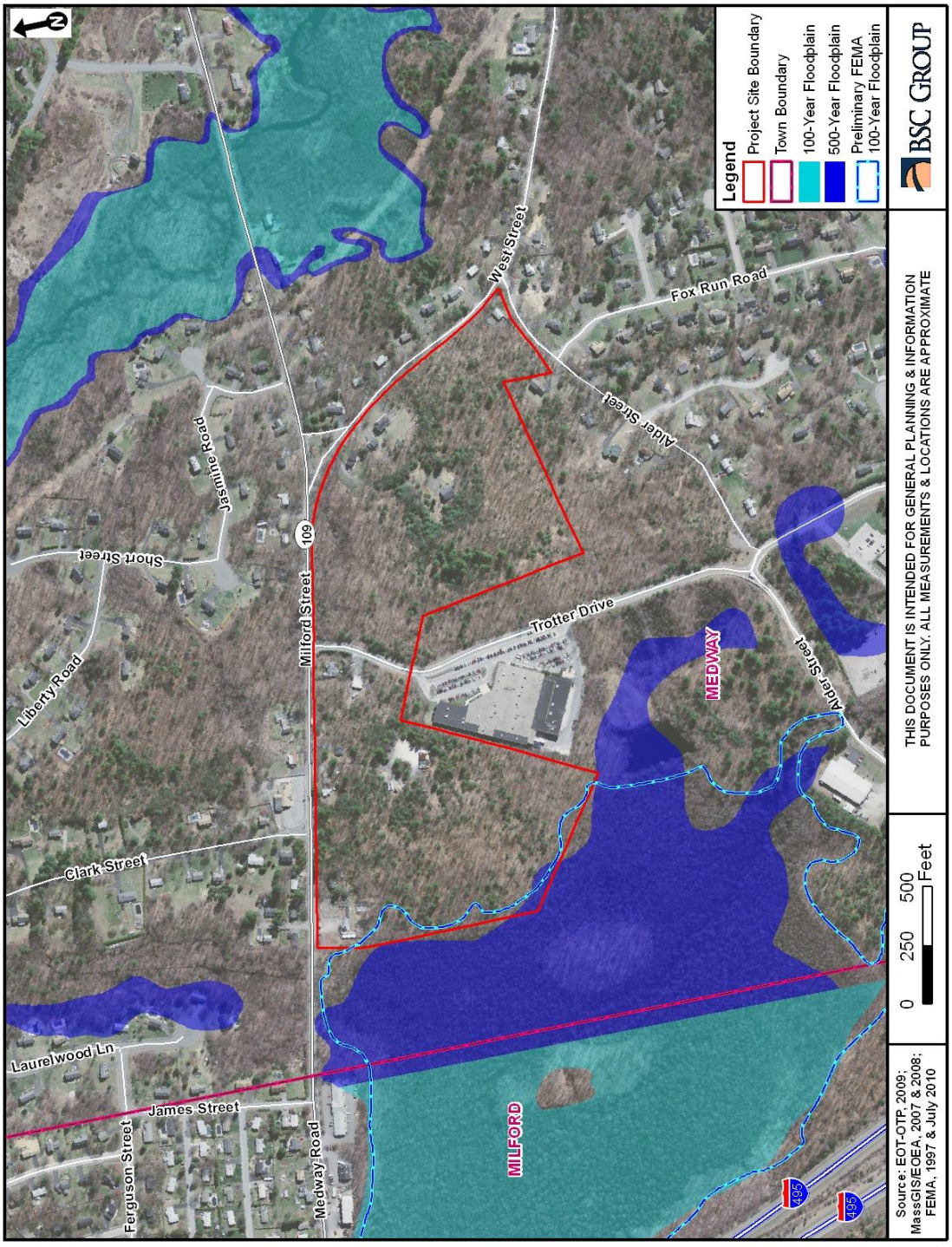


Figure 1-7: Flood Hazard Areas

1.3 Transportation/Access

As shown in Figure 1-8, the site is strategically located at the southeast quadrant of the intersections of Interstate 495 and State Highway 109 (Milford Street). Access to the Massachusetts Turnpike (Route 90) is situated just over 10 miles to the north. Route 95, the major interstate corridor along the eastern seaboard, is located approximately 15 miles east via Route 495. Thus the site has excellent access to major regional and national highways.

According to traffic counts performed in 2005 by the Central Transportation Planning Staff, approximately 18,300 vehicles pass the site on Milford Street (Route 109) which is a two lane state numbered highway. Close proximity to Interstate 495 and the high daily traffic volumes passing the Site are attractive site attributes for economic development.

West Street is a local arterial road which provides access to Medway Center and the Town of Bellingham. Trotter Drive bisects the Site and is the main access to the Medway industrial Park. Alder Road is an arterial street which connects West Street to Trotter Drive and proceeds southwesterly servicing businesses in the Industrial Park. With frontage on multiple streets, the site has excellent access and flexibility for ingress and egress.

There is no public transportation service to the Site or general area. The nearest public transportation link is the Massachusetts Bay Transportation Authority (MBTA) Franklin commuter rail line which has stations in Franklin, Norfolk, and Walpole. The closest station is Forge Park in Franklin which is 6.6 miles south of the Site. Other commuter rail stations are Depot Street in Franklin (7.9 miles) and Walpole (14 miles)

1.4 Utilities

1.4.1 Water

Public water is available to the site from water mains located in the streets on which it fronts. There is a 12-inch concrete lined ductile iron (CLDI) main in Milford Street that continues on into West Street. Alder Street has an 8-inch PVC main running form West Street which changes to an 8-inch CLDI line and changes again to a 12-inch CLDI line at Trotter Drive. A 10-inch ductile iron (DI) main is located on Trotter Drive between Milford Street and Alder Drive.

The public water system in Medway is supplied by four wells. Under the Mass Department of Environmental Protection (DEP) Water Management Act Withdrawal Permit, Medway is authorized to withdraw 1.01 million gallons per day (MGD). However, if the amount exceeds Baseline Withdrawal limits of .99 MGD the permit requires the Town to pay fines and commence offsets, including preparation of a water use reduction feasibility study and implementation of its recommendations.

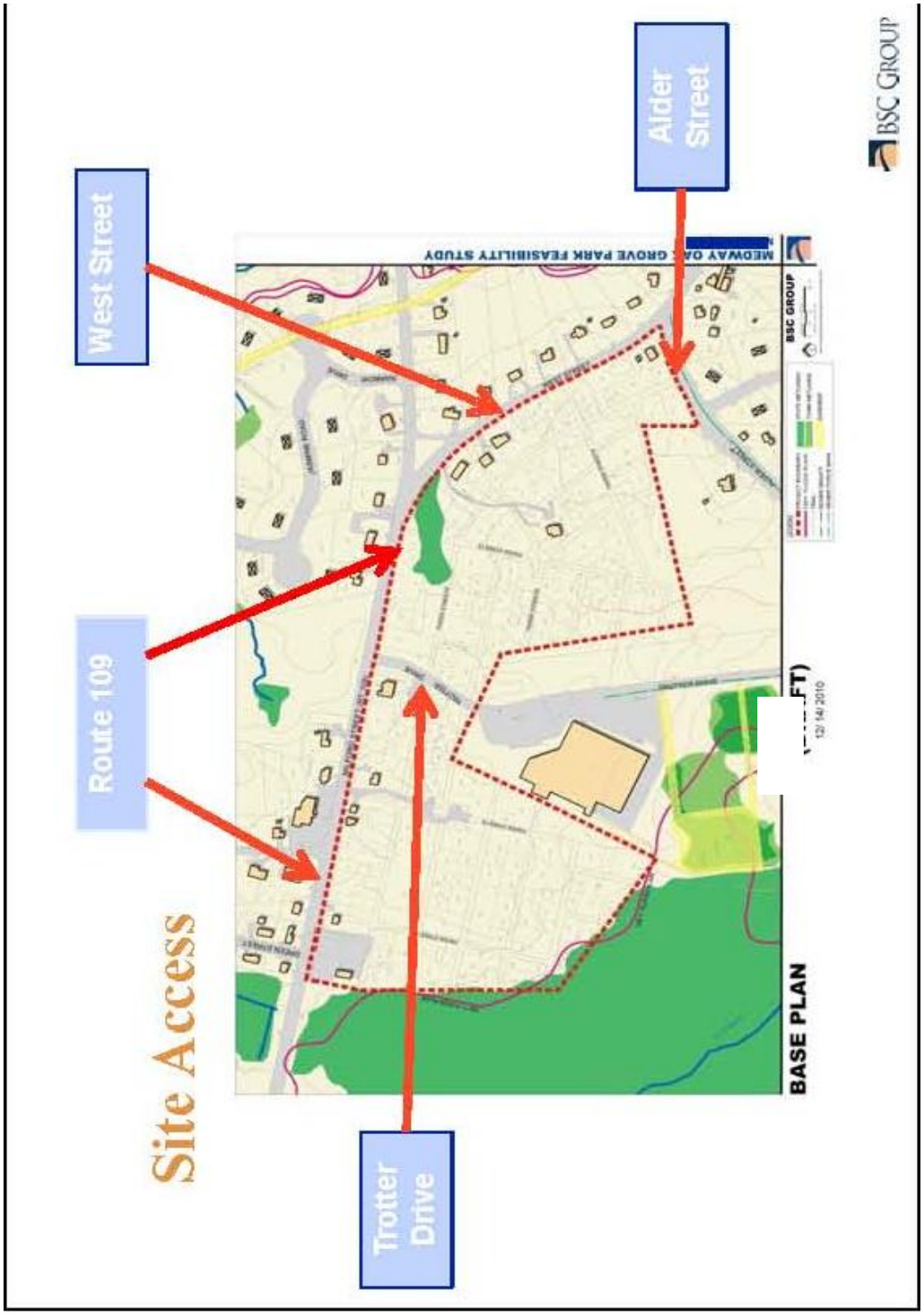


Figure 1-8: Transportation/Access

Current water use in Medway remains under the Baseline Withdrawal limit for most of the year, but demand from June through September increases significantly and has triggered DEP-mandated water bans to curb water usage. Additional well fields to increase production might offer a solution to the seasonal shortages, but because all the water is derived from the same watershed basin DEP is reluctant to authorize increased withdrawal limits. Therefore, new development will need to incorporate low impact development (LID) techniques to maximize ground water recharge as well as water efficient design strategies to minimize water consumption.

1.4.2 Sewer

There is presently no public sewer service on the Site. A sewer extension completed in 2008 brought sewer service to the outer edges of the Site. A 12-inch PVC main extends service from Village Street to West Street. At Alder Street, the line changes to an 8-inch main and runs to a point east of the intersection with Trotter Drive. At that point the sewer line connects to a force main, which is serviced by a sewage pump station located at the southern end of the Industrial Park. The pump station is fed by 8-inch PVC mains which serve portions of Alder Road and Trotter Drive terminating at the Cybex building south of the Site. The invert elevation of the sewer main stub at its terminus on Trotter Drive is 257.48 feet with the surface elevation at 266.93. With over nine feet of cover it may be feasible to extend the sewer service north on Trotter Drive to service at least a portion, if not all of the Site without the need for a pump station

Medway is a member community of the Charles River Pollution Control District (CRPCD) which provides regional wastewater disposal for the communities of Franklin, Medway, Millis, Norfolk, Sherborn, Dover and Wrentham. The CRPCD operates a wastewater treatment facility in Medway which treats and discharges effluent into the Charles River. The plant has an average daily flow of 4.5 MGD from July 1 to September 30, and 5.7 MGD from October 1 to June 30.

As of 2007, Medway was allocated 0.895 MGD of flow, or 15 percent of the facility's authorized capacity. The Town's 2007 average use was 0.720 MGD, which left an excess capacity of approximately 0.175 MGD. The 2008 sewer extension serves two existing businesses and 111 existing residences with a design flow of 86,630 gallons per day or 0.087 MGD. The addition of this sewer extension effectively reduced the remaining excess sewer capacity to approximately 0.088 MGD, or 88,000 gallons per day.

There is little likelihood the wastewater treatment facility will expand its capacity in the foreseeable future. The Town of Medway has initiated efforts to reduce inflow and infiltration (I/I) to prevent extraneous water entering the sewer system. Certain areas with I/I were identified and corrected in 2001 and 2004. This represented the "low hanging fruit" and future I/I reductions will be more challenging.

1.4.3 Stormwater/Drainage

Currently there is no onsite stormwater collection, as the site is predominantly unpaved and undeveloped. Along Route 109, there is minimal stormwater management.

1.4.4 Electric

Electric service to the Town of Medway in the vicinity of the site is provided by NStar via overhead lines on Route 109/ Milford Street. Trotter Drive also has overhead electric transmission lines.

1.4.5 Gas

Columbia Gas of Massachusetts (formerly Bay State Gas) provides natural gas service to portions of the Town of Medway.

1.4.6 Voice and Data

Comcast Broadband Cable and Verizon FIOS are the providers of high speed internet and voice service in Medway.

1.5 Zoning

1.5.1 Use Regulations

The west side of the Site is zoned Industrial III (IND-III), and the east side (east of Trotter Drive) is zoned Agricultural-Residential District II (AR-II). Figure 1-9 provides an overview of zoning on and immediately adjacent to the Site.

AR-II zoning stipulates ½ acre lots for single-family residential development and related accessory uses. Business, retail, office, or industrial uses are prohibited.

IND-III zoning allows general industrial, warehouse/distribution, office uses, research and development, and the manufacturing of alternative or renewable energy products. Retail, residential, hospitality, and heavy noxious industrial uses are prohibited. There is a 40,000 square foot minimum lot area requirement and buildings may not exceed 60 feet in height unless a special permit is granted by the Board of Appeals to increase the height to 100 feet. The district also prohibits an industrial operation within 200 feet to any pre-existing residential use.

The Medway Groundwater Protection District (GPD) is a zoning overlay district that overlaps much of the western half of the Site totaling 15.84 acres. This GPD is associated with wells in the adjacent Town of Bellingham. The State mandates that Medway's Bylaw regulate the types of allowable activities in aquifer and water resource districts. The GPD restricts certain uses such as landfills, storage, use, or disposal of hazardous materials, and earth removal. Such uses are either prohibited outright or require a special permit. Onsite wastewater disposal other than sanitary sewerage is prohibited within the Wellhead Protection Area. Any use rendering more than 15 percent or 2,500 square feet of any lot whichever is greater requires a Special Permit.

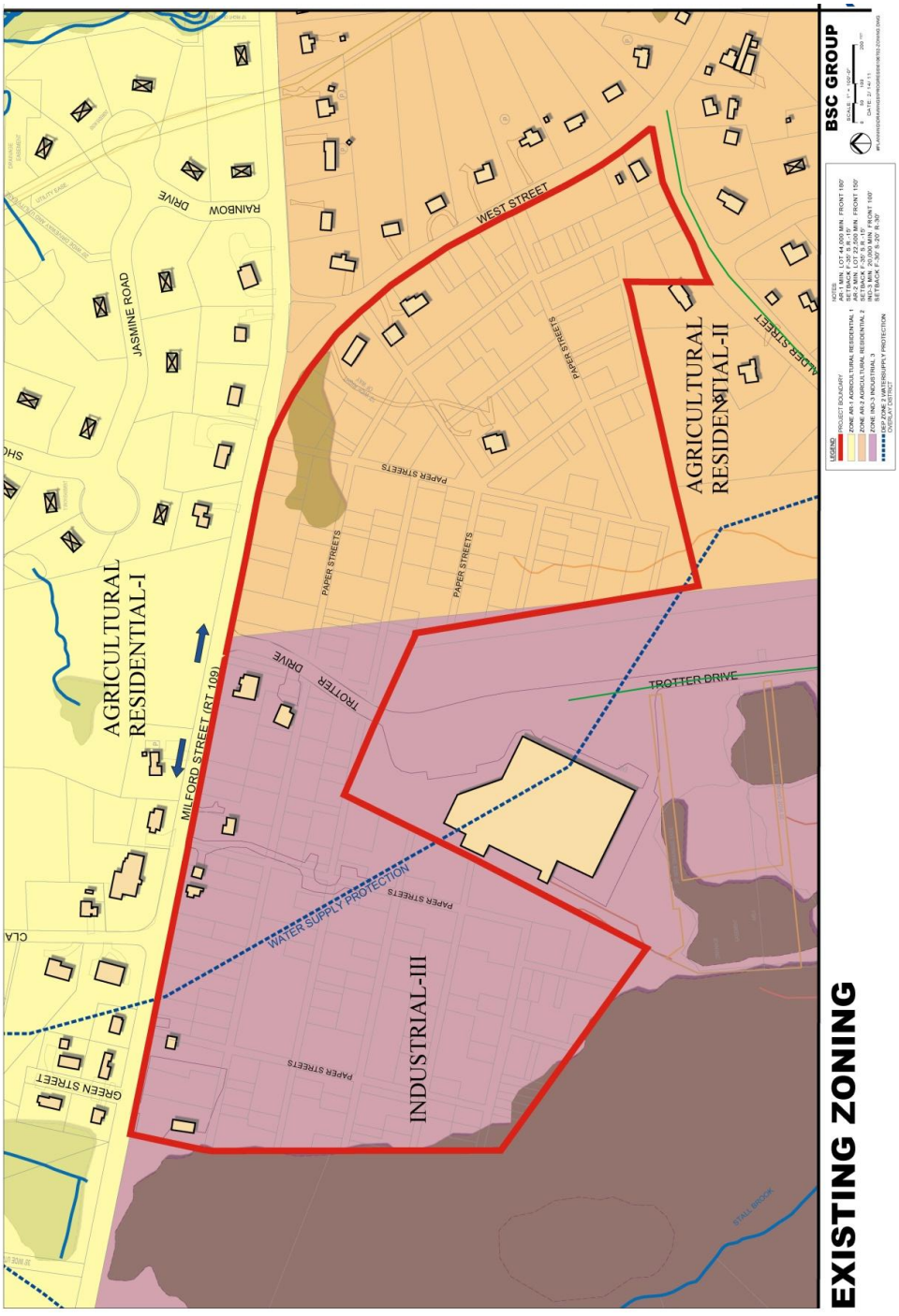


Figure 1-9: Zoning

The Medway Zoning By law requires any development proposal in excess of 2,500 square feet to submit a site Plan application to the Planning Board for review and approval prior to the issuance of a building permit.

1.5.2 Dimensional Requirements

Aside from single family residential uses, the dimensional requirements for the AR-II district would not allow the size and scale of buildings in the non residential development scenarios contemplated. The IND-III district requires a minimum lot size of 40,000 square feet and lot width of 100 feet. The maximum lot coverage by a building is 40 percent and building height cannot exceed 60 feet in height, though a height of up to 100 feet may be allowed by special permit from the Board of Appeals. The IND-III district also requires that industrial operation be located no less than 200-feet from any pre existing residence. As there are pre existing residences across Milford Street from the IND-III zoned area, this restriction would apply to approximately 8.61 acres

1.6 Ownership

As noted previously, the 44-acre Site is made up of the former "Bottle Cap" lots. Ownership is predominately divided between the Town and the Williams family, with the remaining parcels owned by different entities. Figure 1-10: Property Ownership shows the Town's property in yellow; the Williams property in orange, properties owned by National Grid(formerly New England Power)shown in red, and the remaining parcels of scattered ownership shown in assorted colors. Despite the prime location of the project site, the fragmented ownership of the parcels has proven to be a formidable obstacle for development.

1.7 Site Considerations

After reviewing all the Site characteristics and pertinent data BSC has compiled Site Considerations Plans (see Figure 1-12, 1-13, and 1-14) which depict the salient features of the Site and its suitability for development. The major features which directly impact site development, in addition to the fragmented ownership, are the Residential zoning of the easterly portion of the site and the 200-foot setback from existing residential uses for industrial uses established in the zoning bylaws. Amendments to the Zoning Bylaw are recommended to achieve the development objectives envisioned for this Site.

The developable area is further restricted by the wetland resource areas and the 100' buffer zones. The wetland buffer zones do not necessarily preclude development; however any activity within the buffer area is subject to the jurisdiction of the Conservation Commission and proposed projects must demonstrate there will be no impact to the adjacent wetland area.

Water service to the Site is available via existing nearby mains, and providing water service is not expected to entail upgrades to the existing mains due to size and/or condition. For sewer service is to the meet the needs of the entire site, the sewer line will require an extension of the along Trotter Road and into the interior of the east and west

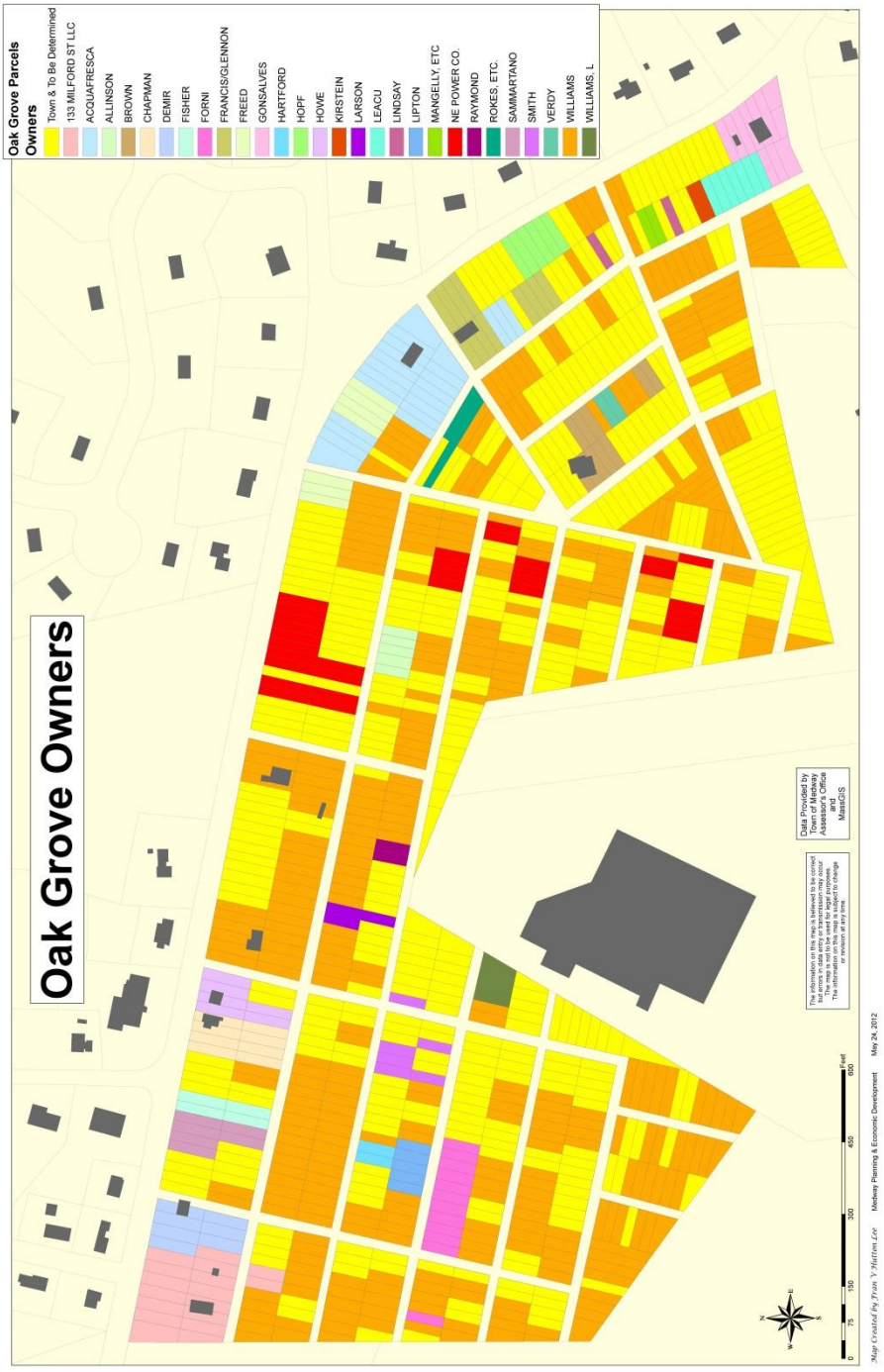


Figure 1-10: Property Ownership

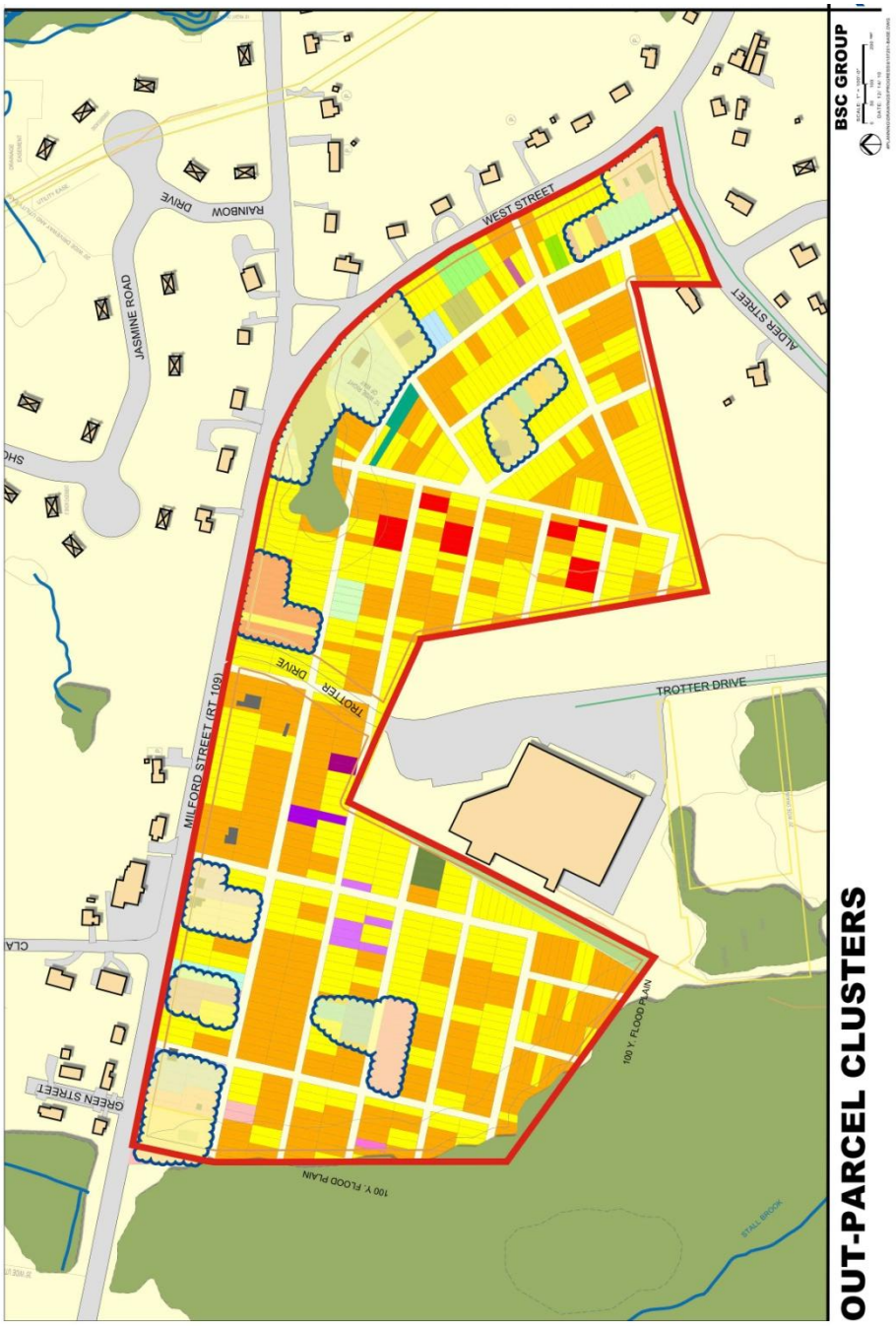


Figure 1-11: Out-Parcel Clusters

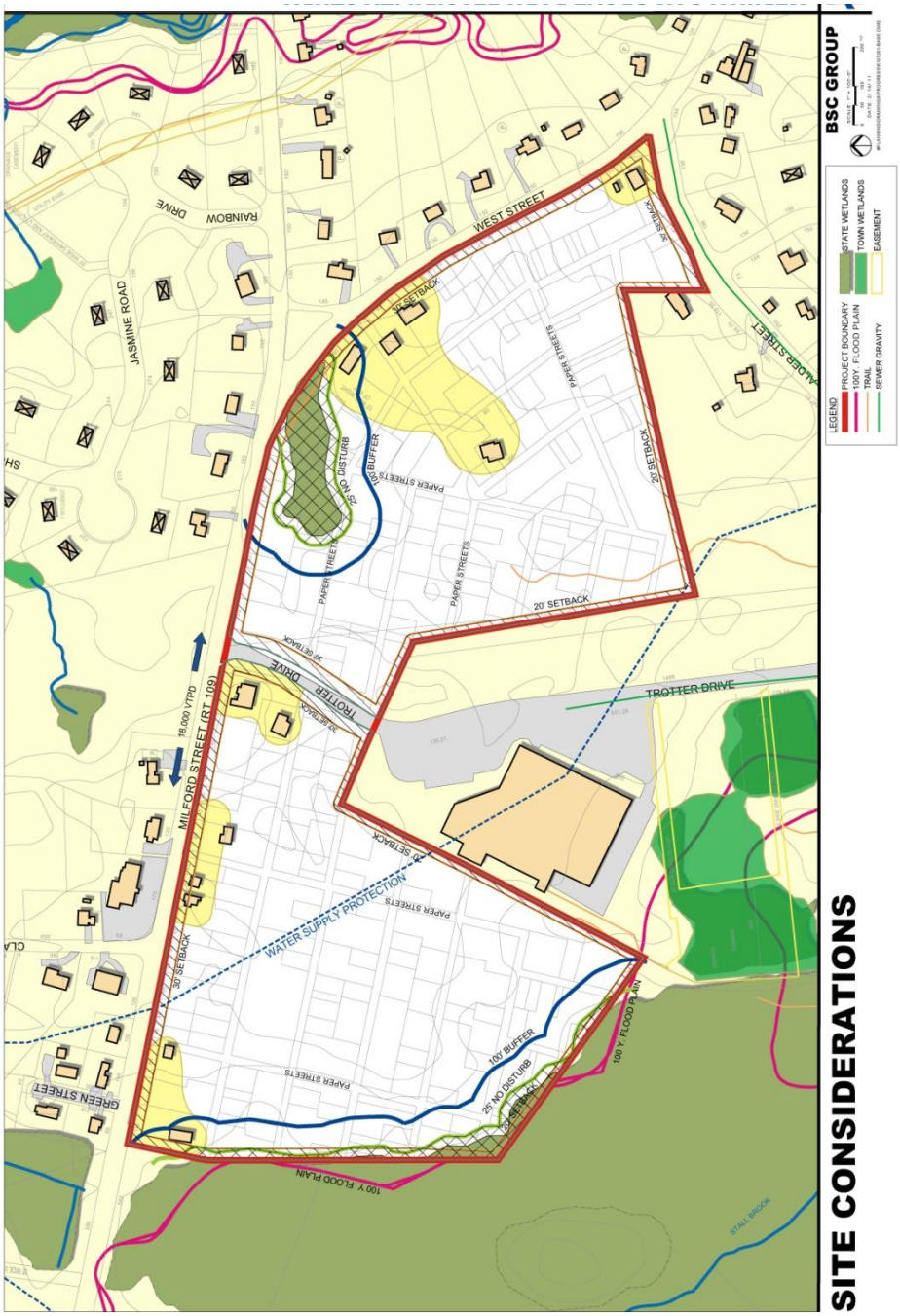


Figure 1-12: Site Consideration

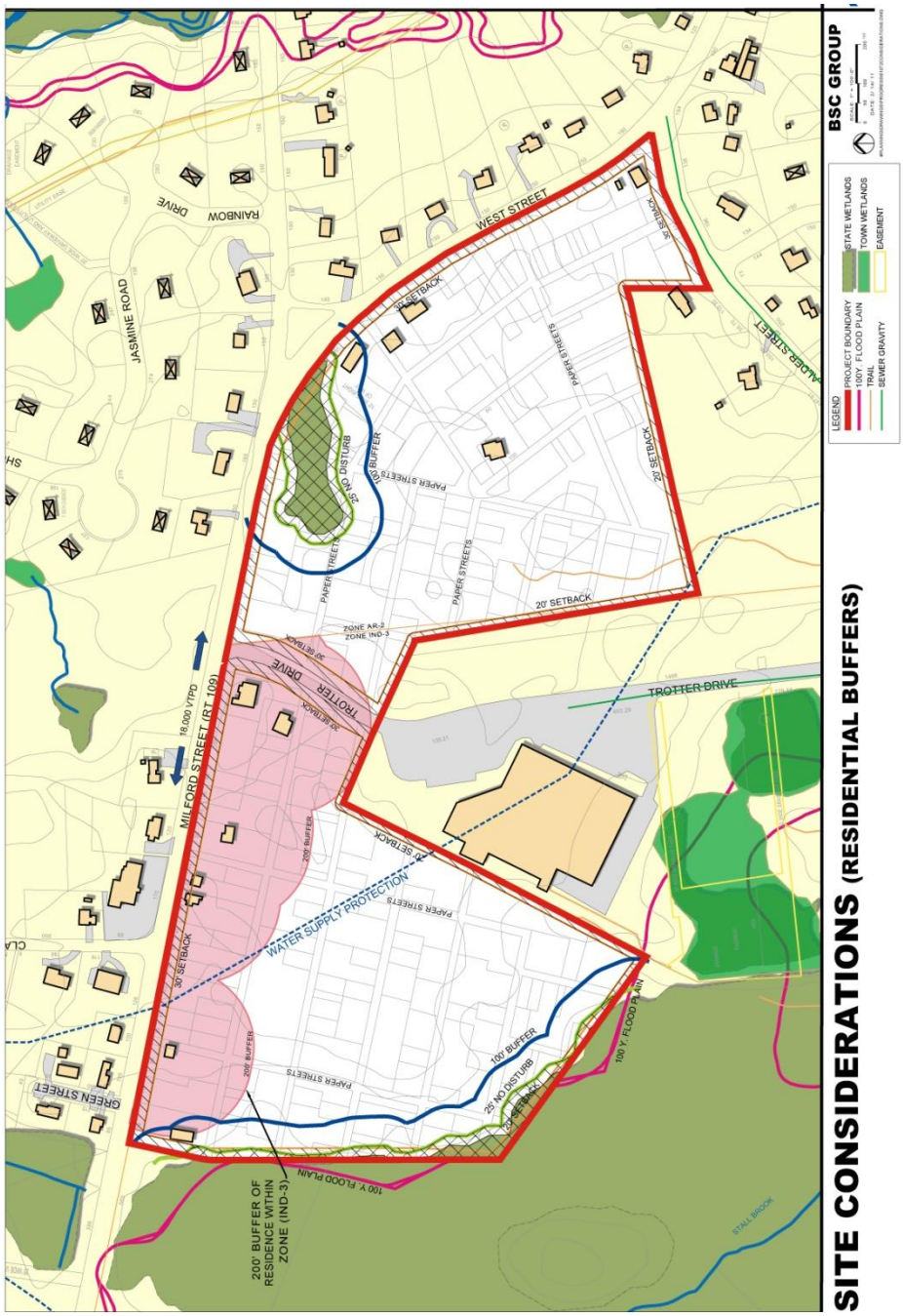


Figure 1-13: Site Considerations Buffers

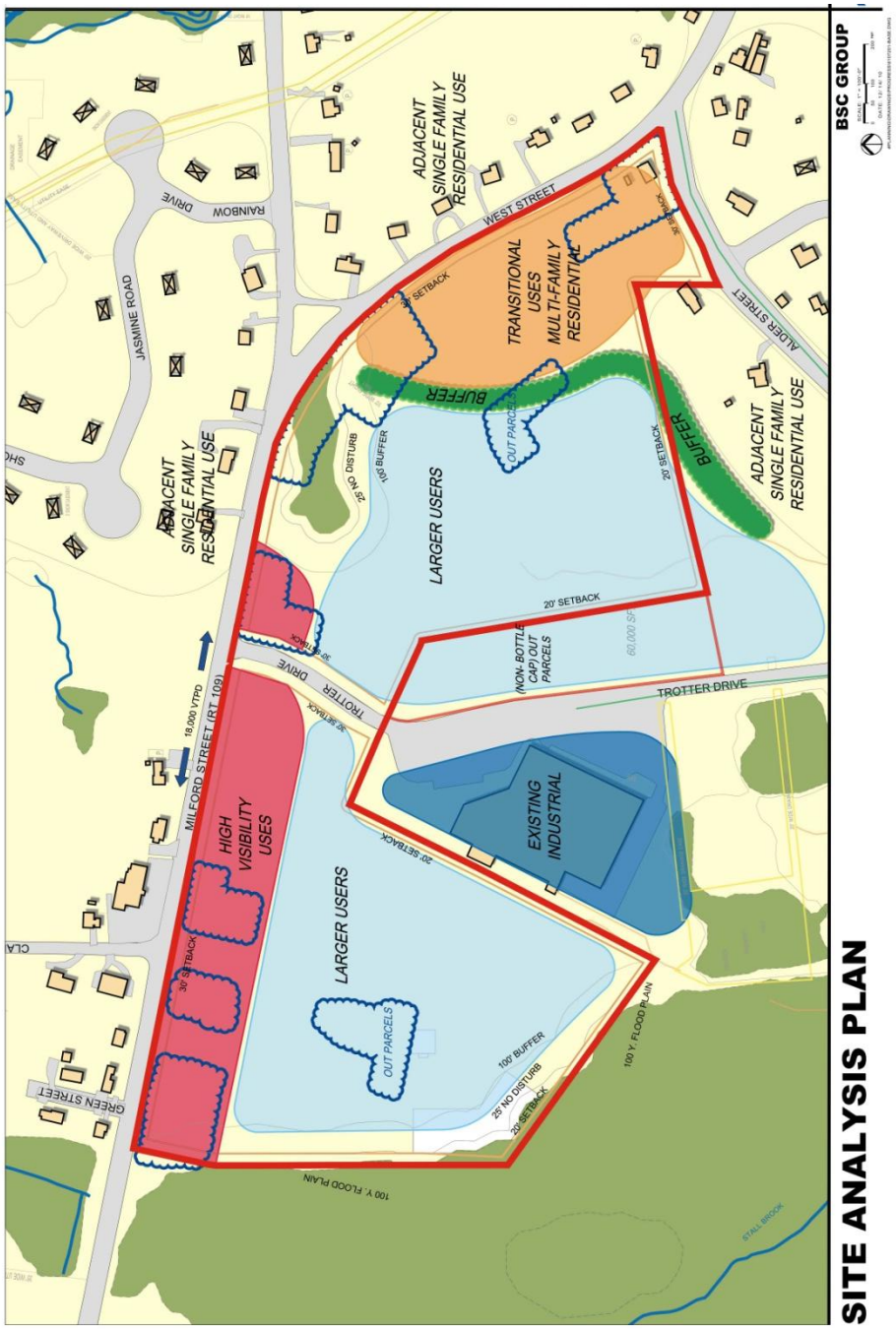


Figure 1-14: Site Analysis

portions of the site. Individual ejector pumps or a pump station may be required to serve the lower elevation and distant locations on the Site. Final determination will depend on first floor building elevations, site topography, and distance from the current terminus of the sewer line on Trotter Drive.

The extensive frontage on Milford Street (State Route 109) offers ample opportunity for business exposure on a heavily traveled roadway. However it is recommended that new direct access from the site be minimized in favor of accessing development sites via Trotter Drive and consolidated access points in order to minimize traffic conflicts.

The eastern portion of the Site borders with an established residential neighborhood on West Street. Transitional uses and vegetative buffers should be considered to minimize impacts to the abutters.

Based on the site analysis an estimate of the development potential of the site (Table 1-1) was prepared to provide a range of the site's development potential based on building footprint coverage. The usable site Area was calculated by subtracting zoning and wetland setbacks and buffer area. Buildable site area was determined using a site utilization efficiency factor of 85% to account for roads. Potential Building footprints were calculated by multiplying the buildable site area times lot coverage percentages ranging from 30 to 50 percent. The resulting building footprint areas range from 383,303 to 638,838 square feet.

Table 1-1 Estimated Development Potential

Site Area	44.88 acres
Zoning Setbacks	4.26 acres
Wetlands	1.21 acres
Wetland 25' No Disturb	1.21 acres
Wetland 100' Buffer	3.69 acres
Usable Site Area	34.51 acres
Site Design Efficiency	85% (
Buildable Site Area	29.33 acres

Potential Building Footprint Areas Based on Lot Coverage

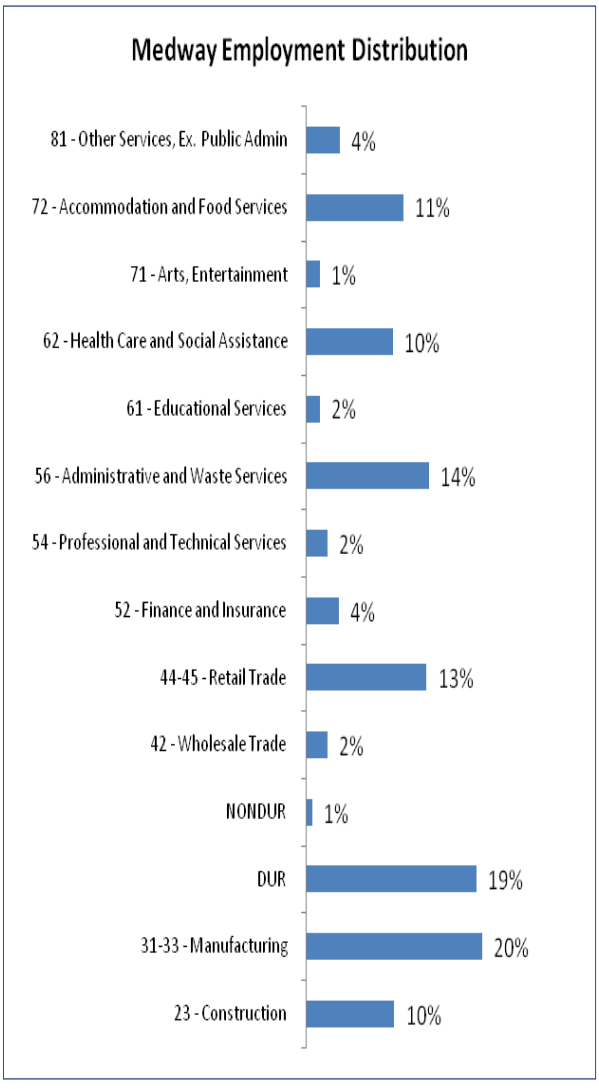
30% lot coverage = .30 X 43,560 X 29.33 = **383,303 sf**
35% lot coverage = .35 X 43,560 X 29.33 = **447,186 sf**
40% lot coverage = .40 X 43,560 X 29.33 = **511,070 sf**
50% lot coverage = .50 X 43,560 X 29.33 = **638,838 sf**

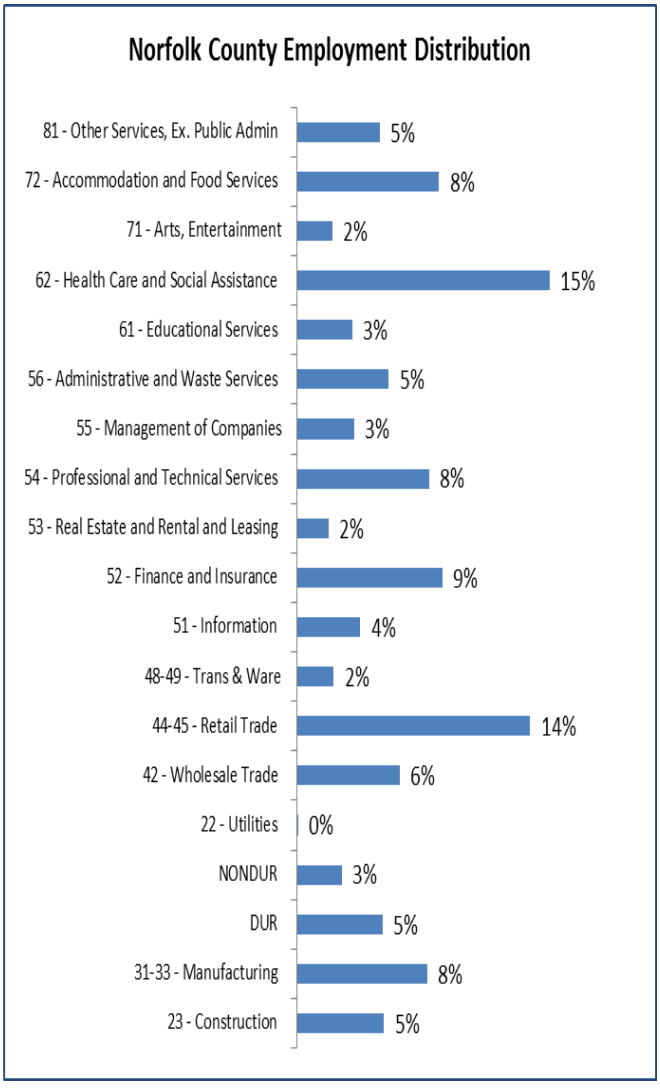
Chapter 2: Market Trends Analysis

2.1 Medway's Economic Context:

Medway's 320 businesses employ 3300 people with major concentrations in manufacturing and industries that don't generate substantial demand for office space– an impact factor in considering diversification of the town's tax base. Medway's economy is also slightly different than Norfolk county employment. For example Medway has substantially fewer jobs as a percentage of overall employment in healthcare and related services but more than two times the number of jobs as a percentage of employment tied to manufacturing.

Table 2-1: Employment Distribution





Several of Massachusetts leading industries have undergone significant shrinkage in the last decade leading to the opening of large amounts of commercial and industrial space in the region.

Table 2-2 Massachusetts Major Industries Employment Trends

NAICS	Industry	Year 2001	Year 2009	Difference	% change
541	Professional and Technical Services	244,148	251,386	7,238	3%
722	Food Services and Drinking Places	201,904	220,142	18,238	9%
622	Hospitals	141,879	176,986	35,107	25%
6221	General Medical and Surgical Hospitals	124,999	155,208	30,209	24%
621	Ambulatory Health Care Services	121,290	146,119	24,829	20%
561	Administrative and Support Services	160,113	140,508	(19,605)	-12%
611	Educational Services	111,914	126,713	14,799	13%
7221	Full-Service Restaurants	100,160	114,270	14,110	14%
623	Nursing and Residential Care Facilities	87,560	98,728	11,168	13%
445	Food and Beverage Stores	92,050	92,523	473	1%
6113	Colleges and Universities	77,433	85,076	7,643	10%
7222	Limited-Service Eating Places	71,333	80,298	8,965	13%
4451	Grocery Stores	75,440	78,001	2,561	3%
624	Social Assistance	58,582	68,249	9,667	17%
524	Insurance Carriers & Related Activities	64,299	65,365	1,066	2%
334	Computer and Electronic Product Mfg	101,659	63,096	(38,563)	-38%
522	Credit Intermediation & Related Activity	60,492	60,196	(296)	0%
6231	Nursing Care Facilities	57,799	59,266	1,467	3%
5511	Management of Companies and Enterprises	71,925	59,003	(12,922)	-18%
423	Merchant Wholesalers, Durable Goods	73,227	56,030	(17,197)	-23%
5415	Computer Systems Design and Rel Services	60,145	55,245	(4,900)	-8%
6211	Offices of Physicians	45,141	51,969	6,828	15%
5221	Depository Credit Intermediation	50,056	51,605	1,549	3%
5617	Services to Buildings and Dwellings	46,966	49,282	2,316	5%
5613	Employment Services	64,881	47,979	(16,902)	-26%

While industries with the largest employment growth shown in Table 2-3, have specialized space needs or are not real estate driven businesses. Moreover, some of the major sources of employment growth, higher education and healthcare are not easily accessible to Medway.

Table 2-3: Massachusetts Industries with Largest Employment Growth

NAICS	Industry	Year 2001	2009	Difference	% change
622	Hospitals	141,879	176,986	35,107	25%
6221	General Medical and Surgical Hospitals	124,999	155,208	30,209	24%
621	Ambulatory Health Care Services	121,290	146,119	24,829	20%
722	Food Services and Drinking Places	201,904	220,142	18,238	9%
611	Educational Services	111,914	126,713	14,799	13%
814	Private Households	15,673	29,894	14,221	91%
7221	Full-Service Restaurants	100,160	114,270	14,110	14%
623	Nursing and Residential Care Facilities	87,560	98,728	11,168	13%
5417	Scientific Research and Development Svc	33,319	43,818	10,499	32%
624	Social Assistance	58,582	68,249	9,667	17%
454	Nonstore Retailers	13,376	22,992	9,616	72%
7222	Limited-Service Eating Places	71,333	80,298	8,965	13%
6216	Home Health Care Services	19,104	27,004	7,900	41%
6113	Colleges and Universities	77,433	85,076	7,643	10%
541	Professional and Technical Services	244,148	251,386	7,238	3%
6211	Offices of Physicians	45,141	51,969	6,828	15%
6241	Individual and Family Services	24,127	30,930	6,803	28%
4251	Electronic Markets and Agents/Brokers	21,261	27,502	6,241	29%
6232	Residential Mental Health Facilities	13,318	18,895	5,577	42%
5239	Other Financial Investment Activities	20,510	25,657	5,147	25%
813	Membership Organizations & Associations	33,412	38,466	5,054	15%
4543	Direct Selling Establishments	6,997	11,934	4,937	71%
5191	Other Information Services	1,094	5,850	4,756	435%
6233	Community Care Facility for the Elderly	10,535	15,240	4,705	45%
5313	Activities Related to Real Estate	8,639	13,241	4,602	53%

2.2 The Regional Real Estate Market:[1]

Medway is centrally located along the I-495 corridor between Framingham and I-95. However, due to the highway network and labor shed the most critical markets to consider are those along I-495 and Rt 128.

The 495 corridor has less office space but substantially more industrial space than the 128 corridor. Vacancy rates are higher and rents are also lower along 495.

[1] A note of caution

- Any market study conducted today will indicate negative to flat square foot absorption of space
- Market analysis / forecasting in these economic conditions is exceptionally difficult
  - Past trends can't be applied – particularly since credit markets are likely to stay tight for the foreseeable future tempering real estate development
  - Employment forecasts suggests a jobless recovery with a lack of clear indications of industry leadership in rehiring

Table 2-4: Regional Commercial Real Estate Market Trends

495 West/South	Rt 128 West / South
• Office (class A&B) market size: 14 msft – Vacancy: 18% – Lease rate $16-$21 • Industrial market size: 46 msft – Vacancy: 15% – Lease rate $4.60 – $5.76	• Office market size: 35msft – Vacancy: 14% – Lease rate: $16-27 • Industrial: 24.6 msft – Vacancy: 5.5% – Lease rate: $5.28-$7.09

Source: NP analysis of broker reports

Because of the large area encompassed by these two corridors the competitive market area for Medway has been defined as running along I-495 over to encompass the Framingham area to the Interstate 495/ Interstate 95 interchange with the focus being on real estate in close proximity to the I-95 corridor.

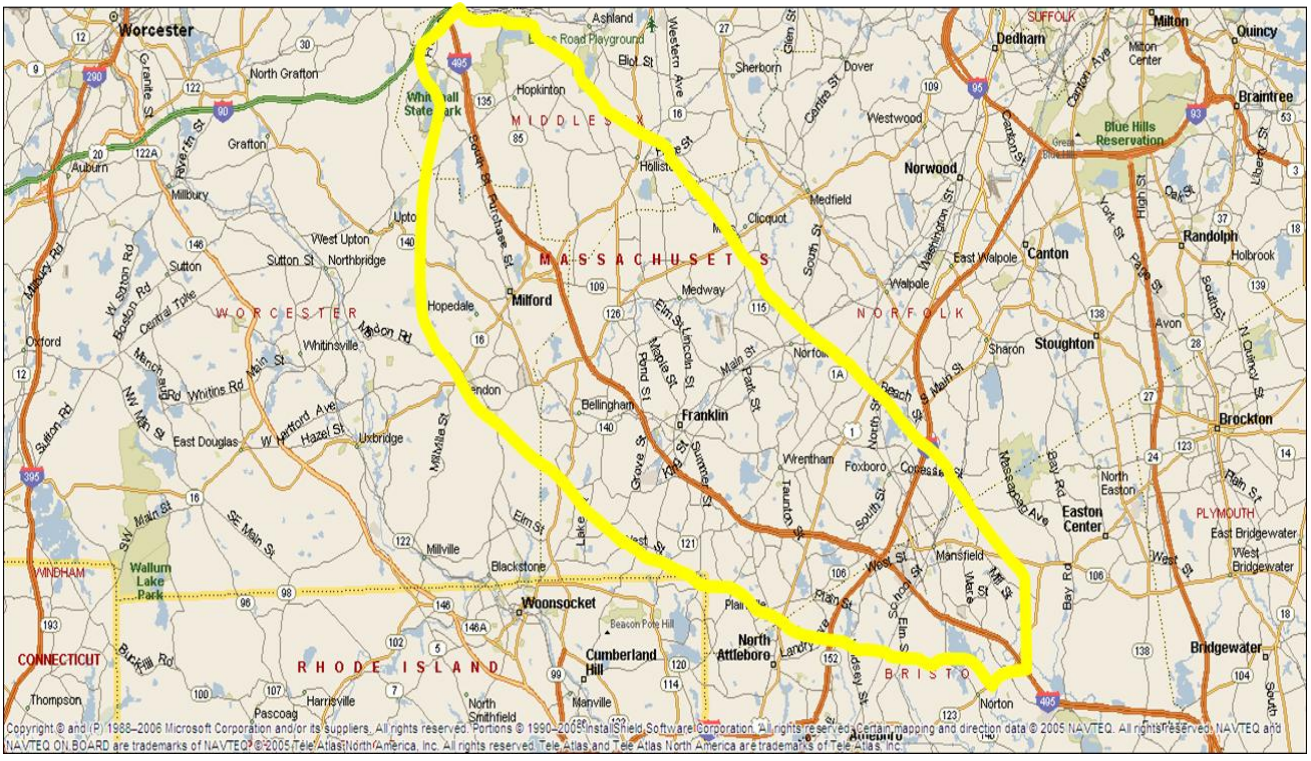


Figure 2-1: Regional Real Estate Market Area

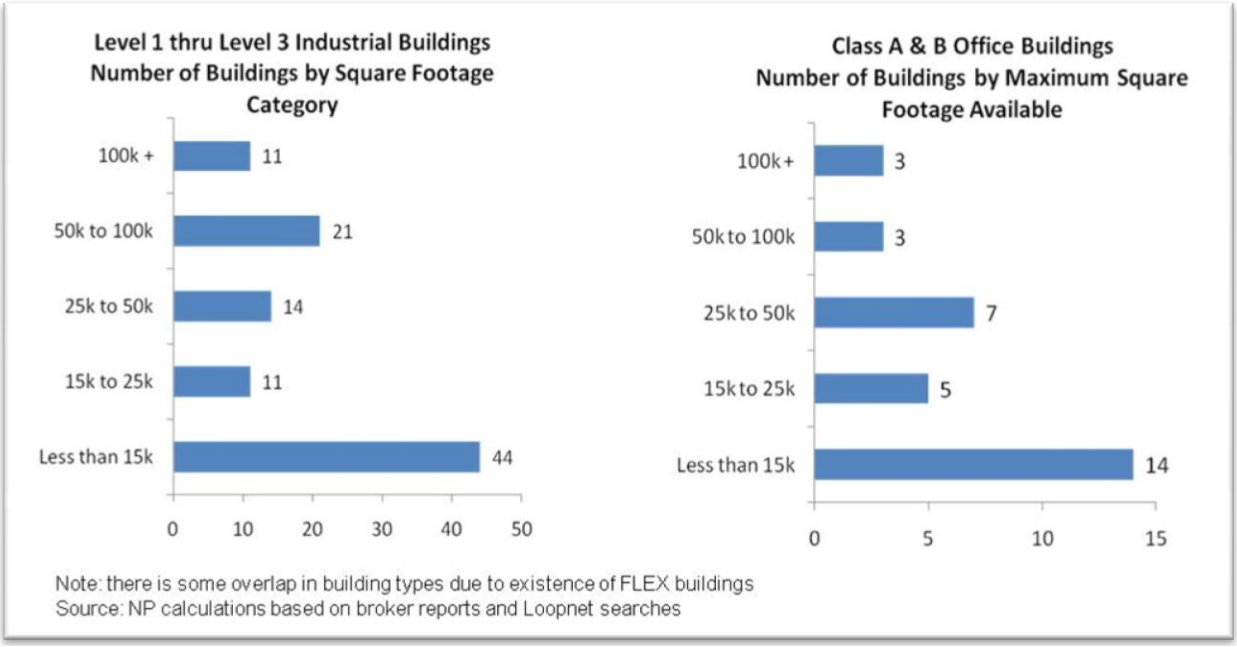
The best way to evaluate a real estate market is to consider not only the raw square footage available in an area but also the building type and quality. For the purposes of this analysis a 6 point scale is used to segment available real estate:

- Level 1: Building at move-in quality
- Level 2: Building needs refurbishment, modifications, or final build-out
- Level 3: Building in place but requires substantial renovation or code upgrades (mill and older industrial buildings)
- Level 4: Developed "pad ready" site with full site approvals, site plans and infrastructure in place
- Level 5: Raw land, zoned industrial or office / industrial
- Level 6: Raw land not necessarily zoned but designated for future business use

Figure 2-2: Examples of Real Estate Readiness:

Across the market area approximately 4.1 million square feet of industrial space is available as well as approximately 1 million square feet of office space. Approximately 10% of the industrial space consists of one warehouse with nearly 400ksft. As evidenced in Table 2-5 there is a substantial amount of small spaces available.

Table 2-5: Available Space



A potential opportunity in the marketplace is for buildings with relatively small footprints in the 25ksft range. Under present economic conditions buildings will accept smaller lease arrangements to generate some revenue, however, that will likely change as the economy improves. Moreover, many of the industrial buildings can be converted to alternative uses. With market conditions such as what exists in the region, speculative new build construction is highly unlikely. Build to suit situations are more plausible.

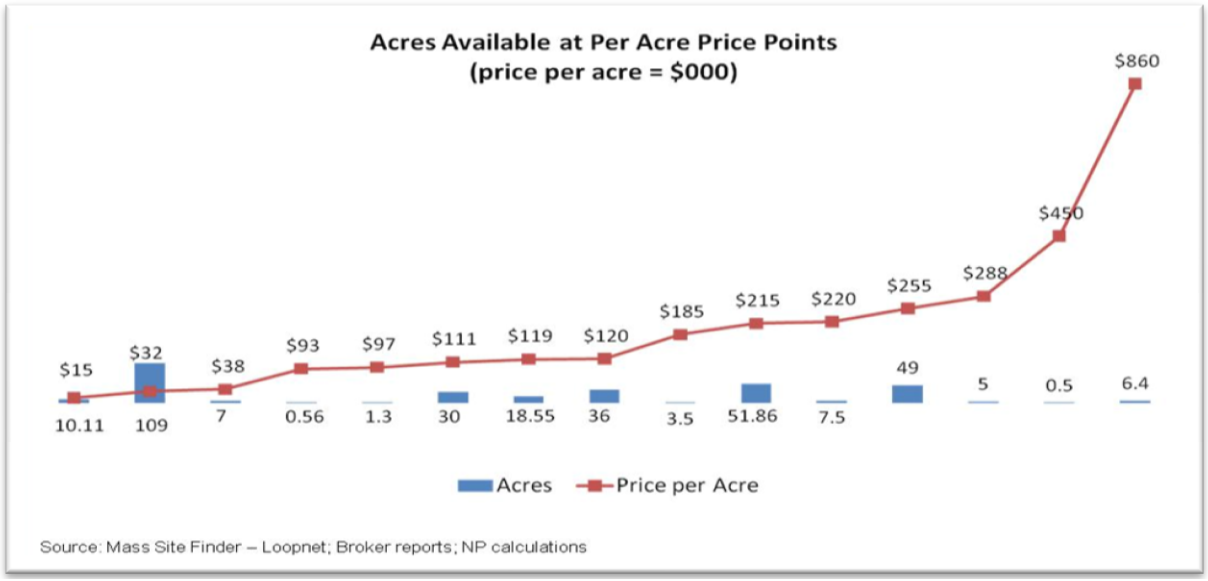
An estimated 387 acres are available for commercial or industrial development in the market area.

- 179 acres or 46% in the market area are considered site ready by MassEcon
- 208 unimproved acres are available between I-90/495 and Franklin

There is also an additional 200 acres in the area presently zoned residential but unimproved on the market.

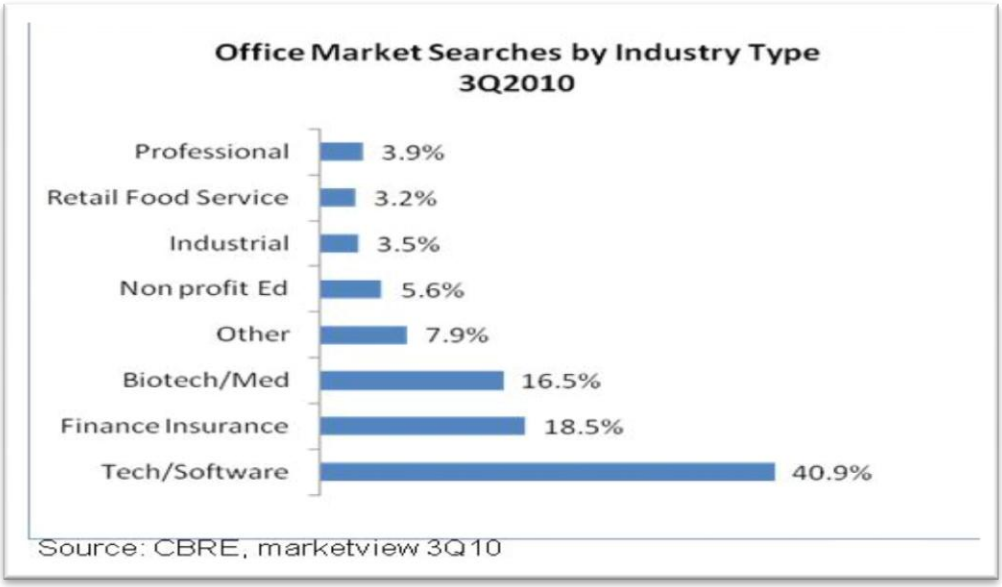
A large chunk of the available land is relatively inexpensive. Table 2-6 shows that 56% of the acreage in the market area is available for less than $200K per acre reflecting the large amount of unimproved land.

Table 2-6: Available Land



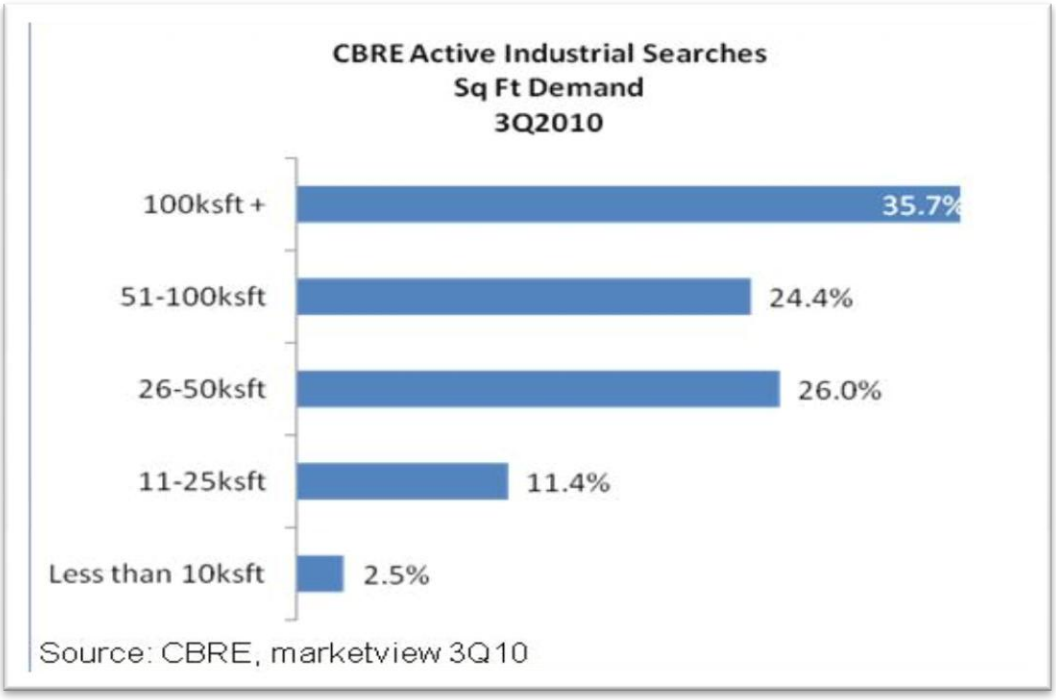
Active searches as depicted in Table 2-7 provide an indication of the type of real estate requirements that are in the marketplace to assist in site planning. CB Richard Ellis market summaries provide an indication of the type of space demand across the larger regional market. Total activity in the market during 3Q10 represents 9.2 million sq ft in searches based on analysis of various brokerage reports most of this does not represent net new demand but lease expirations and consolidations with high likelihood of renewals. 48% of the searches are for space less than 50,000 sf. Tech continues to be the main driver of demand

Table 2-7: Market Demand



Industrial searches reflect a move to consolidate into larger space as evidenced by the high percentage of searches for space in excess of 100,000 sqft shown in Table 2-8.

Table 2-8: Active Market Searches



An interesting perspective to consider when site planning is what did demand look like at the height of the economy. At the height of the Massachusetts economy (2007), an additional 3.1 million in industrial space was in demand over the present 5 million sq ft with more than 72% of space less than 50ksft. Accordingly making investment decisions solely on present economic conditions may miss long-term potential - an economic recovery could radically shift the majority of demand away from large spaces back to smaller spaces

2.3 Opportunity Assessment:

Several development possibilities were considered for the Oak Grove site. These included:

- Biomedical / Life Sciences
- Retail
- Hotel
- Multi-Family Housing

2.3.1 Biomedical / Life Sciences

The Biomedical / life sciences industry[2] is an important driver of employment growth in the greater Boston area. Biomedical industry employment in suburban Boston is nearly 30,000. However, it is not spread evenly across suburban Boston. Employment in Middlesex appears to have more than doubled since 2001 from 10,200 to 26,300 in 2009. Since 2007 employment has grown by nearly 1900 people. In contrast Norfolk county employment has stayed stable during this period fluctuating around 3600 people since 2001.

Employment in life sciences in Middlesex County is concentrated between the RT 2 corridor and I-90. Life sciences employment in Norfolk county is scattered but with some concentration in the Mansfield area thanks to the presence of the corporate offices for Covidien.

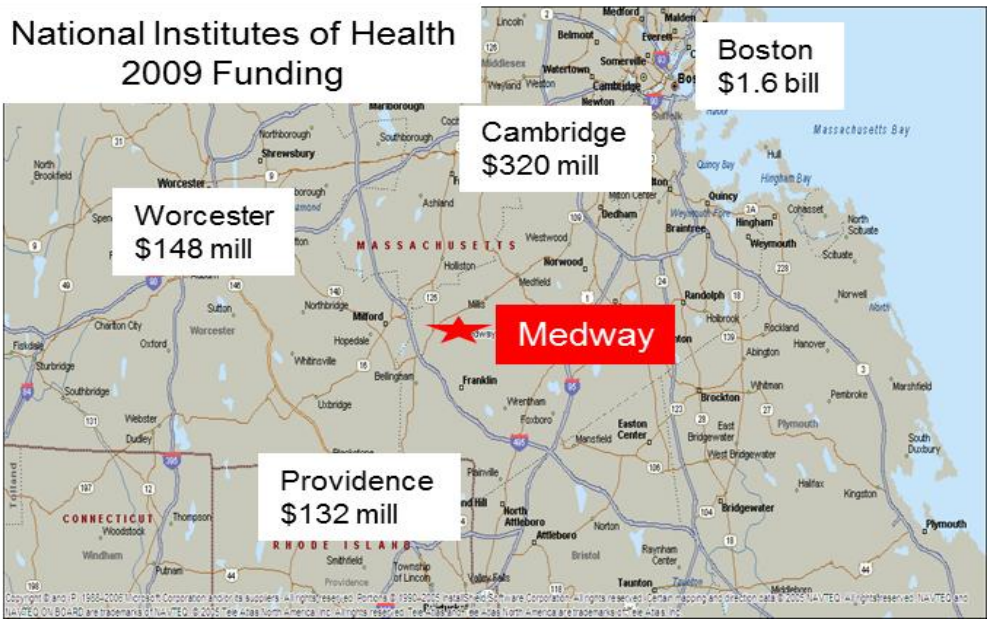


Figure 2-3: NIH Funding

Figure 2-3 identifies the Greater Boston BioTriangle's level of National Institutes of Health funding by cities in the region as calculate by Ninigret Partners. Within 30 miles of Medway resides one of the largest concentrations of life sciences research and development in the world.

Medway is not a location for start ups given its distance from the core research labs in the region. However, it could serve as a migratory location for growing companies along Rt 128 but also Worcester and Providence companies seeking access to the Boston life sciences labor pool given its proximity and location on I-495.

[2] Biomedical employment classified as NAICS 3391 Medical supplies and equipment; NAICS 334510 Electromedical apparatus; NAICS 541711 Biotech R&D NAICS 3254 Bio and Pharm med manufacturing

Colliers Meredith Grew which follows closely the life science market, reports a vacancy rate of 9.5% across suburban Boston (excluding Cambridge) which translates to approximately 543,000 sf of available space. But more importantly they note:

"Since late 2007 firms in the 15,000 to 40,000-square-foot range have been challenged to find quality existing lab and "biotech-ready" shell space in the suburbs …First, options in the Waltham and Lexington markets – historically target locations for migrating Cambridge companies – are somewhat thin. Second, the available space is often second generation space in the 30,000 to 70,000 square-foot-range which is not easily reconfigured and subdivided. This lack of flexibility in reconfiguring existing space means there are limited workable options given the size and space requirements of tenants in the market."[3]

However, nearly every community in the BioTriangle of Boston, Worcester and Providence is interested in pursuing life science based economic development opportunities. For Medway competing for biotech/life sciences will likely require becoming a BioReady community as designated by MassBio. As Figure 2-4 suggests nearly every community surrounding Medway has achieved at least the minimum level of BioReady designation.

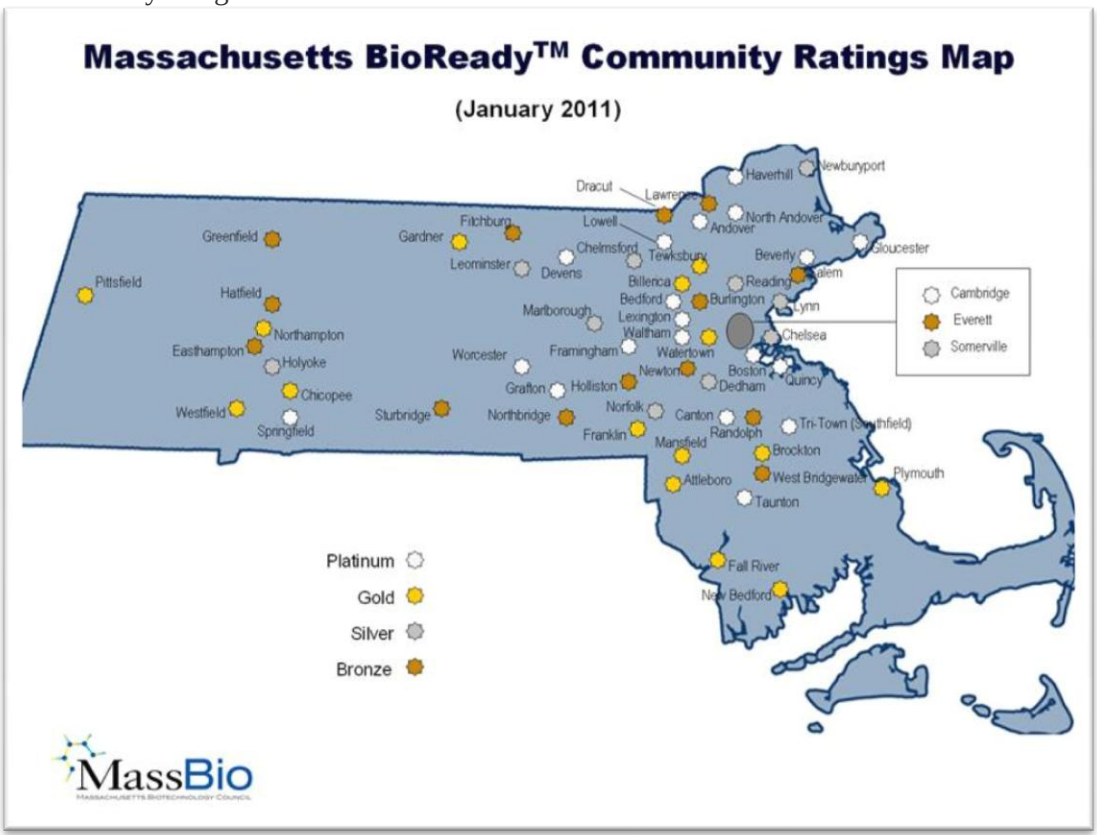


Figure 2-4: MassBio Ready Communities

[3]Colliers Life Sciences Review Summer 2010

Achieving designation requires coordinating planning/zoning, development activity and infrastructure availability. Table 2-9 identifies the criteria for each level of designation by MassBio.

Table 2-9:MassBio Rating Criteria

Rating	Requirements
Bronze	A municipality at this level features municipal water and sewer in commercial and industrial areas, zoning allowing for biotech laboratory and manufacturing uses by *special permit, and has identified a local point of contact in to assist biotech projects.*
Silver	A municipality meets all Bronze criteria AND allows biotech uses *by right, convene Site Plan Review meetings to expedite development projects, and has identified sites for biotech uses in municipal plans or has land sites and/or buildings included in BioSites inventory at* ***www.massachusettssitefinder.com,*** or is a Growth District, or has identified Priority Development Sites per Chapter 43D.
Gold	A municipality meets Silver criteria *plus has sites or buildings pre-permitted for biotechnology use, OR has existing buildings in which biotech laboratory or manufacturing activities are taking place.*
Platinum	A municipality meets Gold criteria plus has adopted the National Institutes of Health guidelines on rDNA activity as part of its Board of Health regulations, has a building or buildings that are already permitted for biotech uses and which have 20,000+ square feet available space for biotech uses *OR has a shovel-ready pre-permitted land site with completed MEPA review and municipal water and sewer capacity to meet additional demand.*

Source: MASSBio

Life science companies require specific types of infrastructure. MassBio has provided a guide for communities considering pursuing life science industry opportunities. Table 2-10 provides a summary of the different types of biobuildings and their infrastructure requirements. Medway should note the water and sewer requirements. It should be noticed that there is a significant amount of process development work underway to significantly reduce the water consumption of these types of facilities.

Table 2-10: Bio Science Infrastructure Requirements

	Footprint	Water Use	Sewer	Natural Gas
Basic Research	10-20ksft minimum with expansion capacity	8-20000 gpd	Some pretreatment, use of neutralization tanks	Required
Process Development	10 to 20ksft minimum Typically able to expand to pilot plant	20000 gpd	Same as above	Required
Pilot Manufacturing	10 to 35ksft	2400 gph per 1000sft	Adequate public sewer capacity. Discharges require kill systems and pH pretreatment	Higher volume than process development
Manufacturing	At least 100ksft	Varies by process but planning model 1.5 million gpd per 100ksft manufacturing Also requires standby water system	Same as pilot with larger scale	High volume
Fill & Finish	20ksft minimum	Much less than manufacturing		Required

2.3.2 Retail

Retail uses were not examined in depth. Our site survey quickly identified a substantial amount of retail capacity in the immediate vicinity:

Retail capacity represents a full range of retail mix from local retail to chain store discount shopping to branded consumer / mass luxury retail[4]

In addition, the close proximity to Patriots Place, Wrentham outlets and Natick leaves little gap in the market place for a differentiated retail product.

[4] Existing retail within 5 miles includes Wal-Mart, Staples, Barnes & Noble, Kohls, Target, Best Buy, Home Depot, Bob's Discount Future, Whole Foods, Old Navy, Jos A Banks, Gap, Toys R Us, PetSmart, Sleepys, Sports Authority, Lowes and various major supermarket chains

However, several of the plazas anchored by grocery stores are aging suggesting either a major retrofit will need to take place or new shopping plazas will be developed.

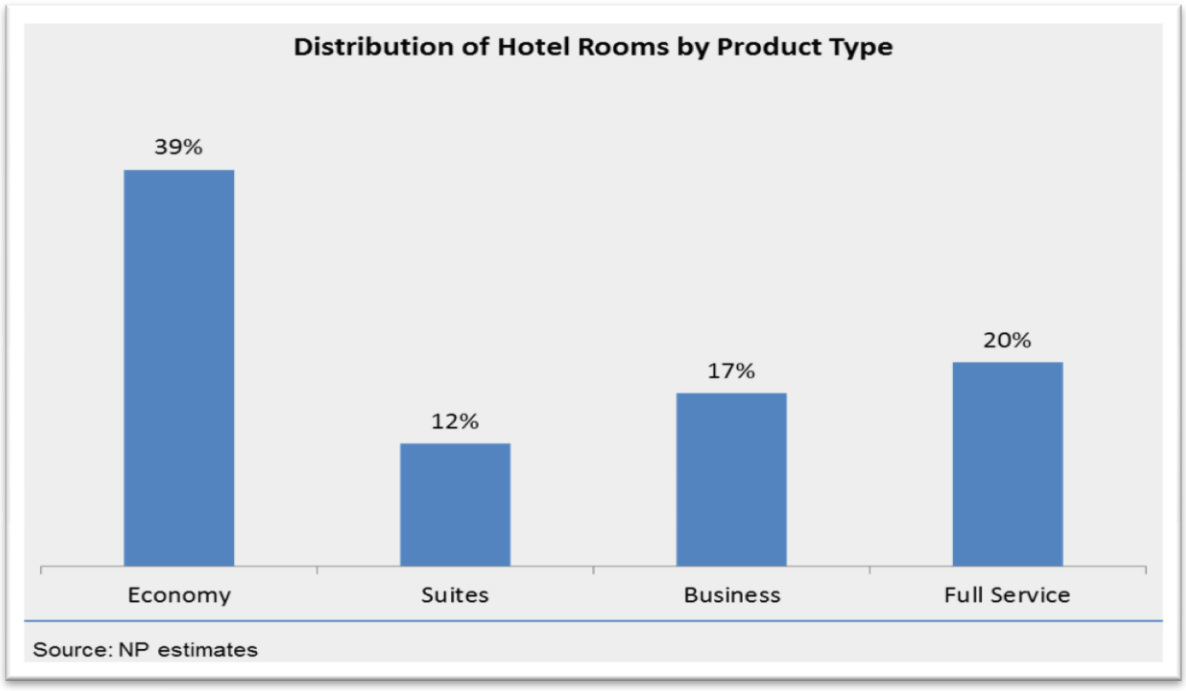
2.3.3 Hotels

There may be potential hotel development along the I495 corridor particularly if employment continues to expand.

The immediate market area (inside of 10 miles) has a daily capacity of 904 room nights divided among the following category of hotels as depicted in Table 2-11:

- Economy: hotels with minimal amenities, e.g. Fairfield Inn
- Suites: hotels with larger rooms and identified sitting areas, e.g., Residence Inn
- Business: hotels that offer some food services and business services with smaller meeting spaces e.g., Courtyard by Marriott
- Full Service: hotels with full food services, business services, and large meeting / conference spaces

Table 2-11: Distribution of Hotel Rooms



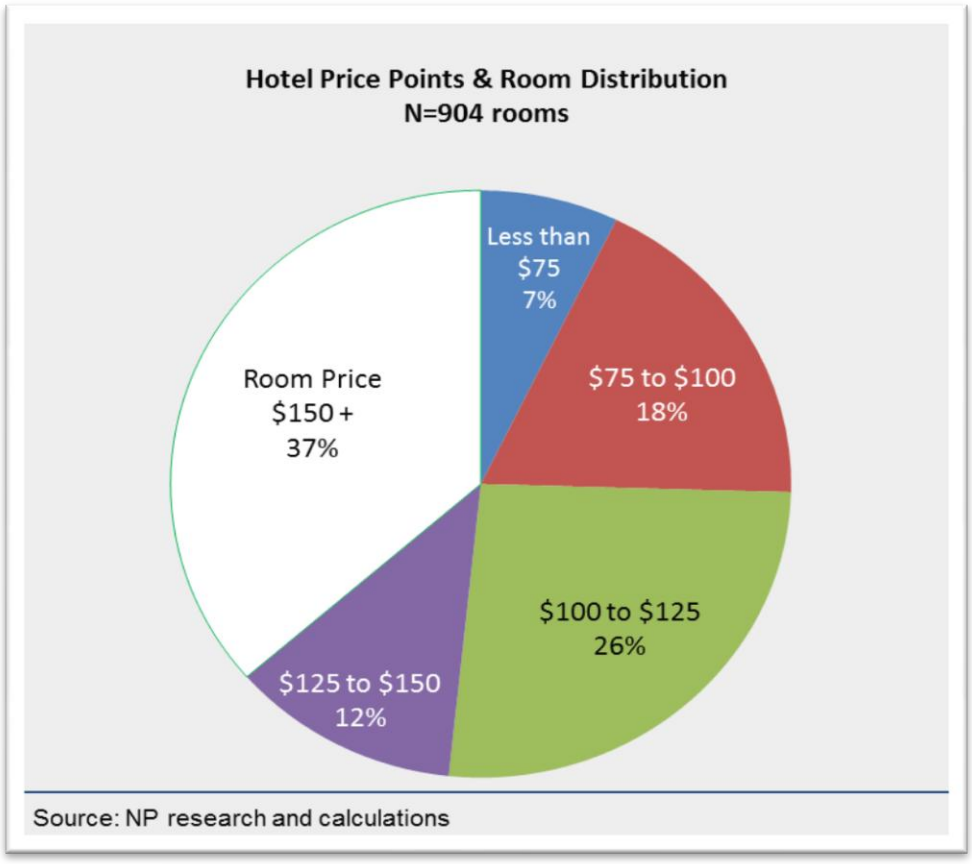
Lack of precise market data regarding the hotel market for submarkets such as the Medway I495 corridor makes it difficult to determine overall demand. However, market

potential can be inferred through a comparison of price points across the area of random dates:[5]

- Economy/value hotel room night pricing is lower than the regional market including northern RI, Rt 128, 95 / 495 suggesting oversupply or saturation
- The immediate market has limited extended stay / suite style hotels
- Business hotel costs per room night are equivalent to business hotel costs along the Rt 128 corridor between Newton and Burlington
- Full service hotel room night price points are the highest in an area including Foxboro and I495 / 90 areas which may indicate high demand. Discussions revealed that a number of the larger businesses were concerned about the relative lack of high quality full service hotel rooms in the immediate vicinity.

Table 2-12 breaks down the hotel market by price points.

Table 2-12: Hotel Price Distribution



[5] Pricing survey took place January 10 thru February 10, 2011.

2.3.4 Multi-Family Housing

Multi-family housing was also considered for the Oak Grove site. Within 10 miles of Medway there are 17 large multi-family apartment complexes with available rental units. Approximately 700 units within 4 major complexes have been constructed in the last decade. Figure 2-5 shows the distribution of large multi-family complexes.

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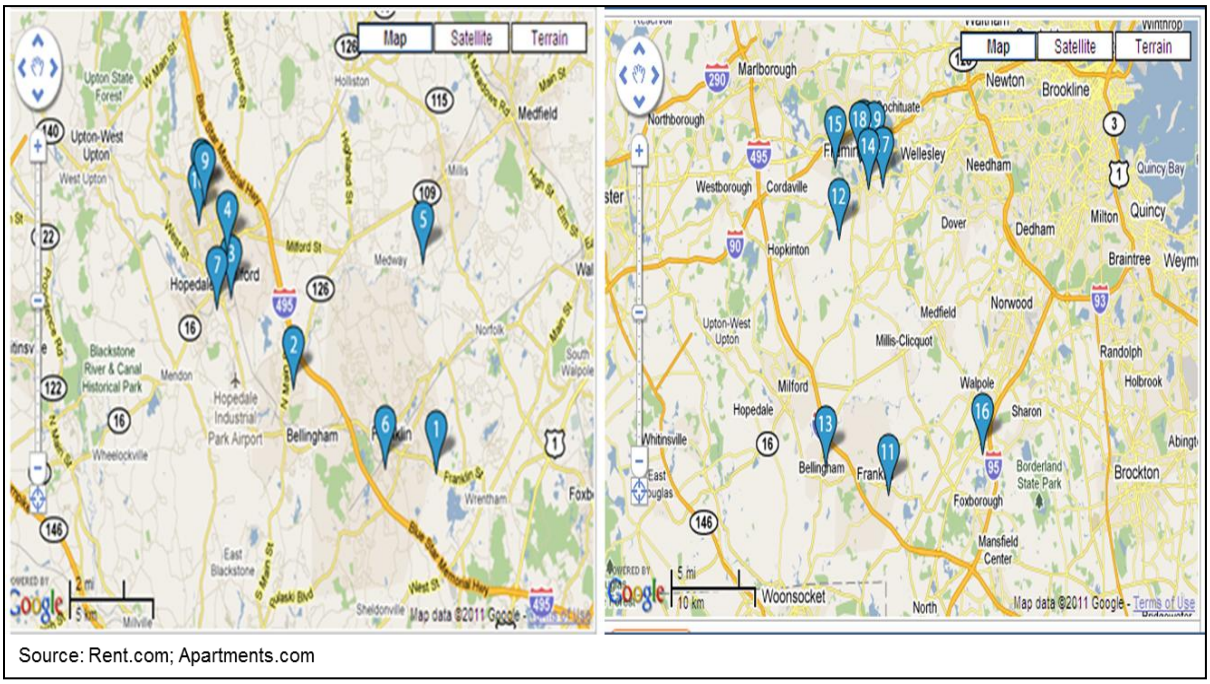


Source: Rent.com; Apartments.com

Figure 2-5: Distribution of Multi Family Housing

Table 2-13 compares the present multi-family marketplace by units and price points

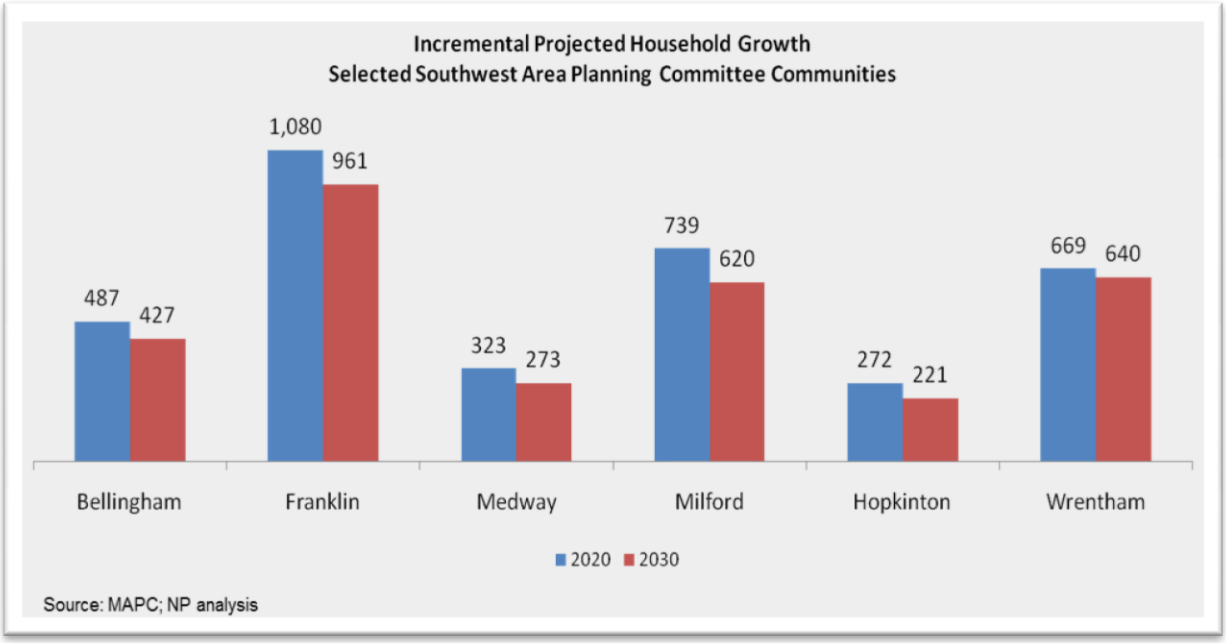
Table 2-13: Multi Family Rental Rates

Complex	Community	Total Units	Listed Price Points (per month)
Union Place	Franklin	300	$1220 -$1550
Franklin Commons	Franklin	96	$949-$1555
Jefferson @ Bellingham	Bellingham	285	$965-$1310
Franklin Landings	Franklin	89	$900-$1499
The Preserve	Walpole	300	$1249-$1545
Cedar Heights	Mansfield	66	$1320-$1620
West Village	Mansfield	200	$1515-$2051

Source: Rent.com; Property managers

Looking forward projected household growth suggests the continued need for multi-family units as part of the required housing mix. Over the next decade an anticipated 3600 households are expected to be added to the area. Table 2-14 shows the estimated household growth by community. It should be noted that town level projections are based on current trends.

Table 2-14: Projected Household Growth



Based on these estimates the region will need to add on average 446 housing units a year for the next 8 years to meet anticipated demand. Based on the present profile of multi-family housing 190 units would represent an average sized development project.

2.4 Development and Planning Implications

As Medway moves forward several items need to be considered:

Site Planning: The site could serve multiple markets including hotel, office, R&D, manufacturing or distribution or a single tenant campus, therefore, sites should be designed to be easily combined to accommodate different uses as market opportunities emerge.

Site Readiness: Accelerating its development potential will require taking steps to make the site "market ready". There is simply too much market ready capacity in the market compared to the assembly challenges posed by this property. However, the site does have some topographic advantages over remaining prime development sites in the area. Figure 2-6 provides an example.

Figure 2-6: Site Preparation Example

Zoning: Given the range of potential uses for this property Medway should think about using zoning and design guidelines to control unintended or undesired development.

2.5 Development Program

With the market conditions described and the development implications considered a reasonable development program would be as follows:

- 70 -110 housing units possibly more depending upon footprint
- 150-200 bed hotel with 10-20ksft of conference space
- Mixed first floor retail with above office space aimed at the local market
    - 20-30ksft footprint with space easily subdivided
    - Important to note that the retail may require subsidy and may have to be tied to an incentive program involving the housing
- Industrial lot design that allows for expansion of footprint to accommodate potential tech business on-site expansions e.g., increasing from 50ksft to 100ksft

Chapter 3: Preliminary Concept Plans

3.1 Key Considerations

The first Public Forum was held on February 15, 2011 to share the information assembled about the project area as outlined in Chapters 1 and 2 of this report. The Public Forum provided an opportunity for residents, property owners and public officials to review the initial findings and offer feedback and input on the planning process. Among the issues discussed at the Forum include the below-listed considerations

- Fractured ownership of the project site and how it has thwarted development.
- Location is the gateway to Medway.
- Opportunities for mixed use development.
- Potential to create new employment opportunities and expand the Town's tax base.
- The findings of the Market Study should help shape the type and form of development:
    - Market potential for 70 -110 housing units;
    - Demand for a 150 - 200 bed hotel with a function/conference space of 10,000 to 20, 000 square feet;
    - Mixed use retail-office of 20,000 to 30,000 square may be possible, space should be sub dividable;
    - Industrial development should allow for user expansion potential from 50,000 to 100,000 square feet of building footprint;
- Town officials desire to see something happen with the site.

3.2 Purpose of Concept Plan

In order to fully understand the Site's physical characteristics, regulatory implications and development potential, BSC conducted a conceptual planning process. This approach allowed comparative examination of the potential type, massing, location, and size of buildings in relation to the carrying capacity of the Site. Through an iterative process, Town officials, residents and property owners could visualize dynamic interrelationship of particular development schemes relative to site conditions, regulatory provisions and development goals.

Below is an overview of the conceptual design process that was conducted at the second Public Forum:

- Explore building massing, type, location, and size.
- Multiple configurations of building types.
- Consider non Bottle Cap out parcels.
- Optimize use of site.
- Conceptual by design.
- Stimulate discussion and response, and
- Arrive at a consensus.

3.3 Framework for Site Planning

A number of factors were considered in the formulation of alternative concept plans are described below:

- **High visibility on Route 109**. The site is located less than ¼ mile from the interchange of Route 109 with Interstate 495. Over 18,000 vehicles per day travel past the site which provides great visibility for retail and/or corporate use.
- **Good Accessibility**. The proximity of the site to the 109/I495 interchange offers tremendous access to and from the regional highway network
- **Residential Abutters.** In addition to the residential uses on the project site there are established residential neighborhoods to the northeast and south of the project site. Development should be mindful to these abutting uses.
- **Commercial Abutters.** The northwest corner of the site on Milford Street is developed with a one story commercial building occupied by an insurance company. The development plans will incorporate this use into the overall plan
- **Out Parcels**. The majority of the former "bottle Cap" lots are owned by the Town of Medway and the Williams family. The Williams family has expressed interest in working in concert with the Town to pursue development options. The remainder of the parcels are scattered throughout the site with fragmented ownership. These out parcels shown on Figure 1-10 are generally grouped in 8 clusters. Additionally, there are another two tracts of land located on the east side of Trotter Lane contains owned by National Grid and Anthony and Marguerite Mele. The National Grid parcel was originally purchased by New England Power for a transmission line right-of-way. The transmission line was ultimately constructed east of the project site and this parcel may be available for future development. The Mele parcel is a narrow appendage of a lot with most of its area and frontage on Alder

Street. Due to its narrow width the portion of the Mele lot on Trotter Drive has limited if any development potential as a standalone.

- **Environmental Considerations**. As previously noted in this report, the site contains or abuts a number of resource areas including flood zone, wetlands, and groundwater protected district. Site development should endeavor to preserve and protect these resource areas zoning.

  The proposed development vision for the project area will not be supported under the current Industrial and Residential zoning districts. The zoning map and/or Bylaw will require amendment.

- **Prospective Users/Building Types**. The potential users identified in the market study will be located in buildings similar to the structures illustrated in the Building Typology section of this report.

- **Provide Adequate Parking**. The buildings and the uses proposed for occupancy shall provide parking in sufficient quantity.

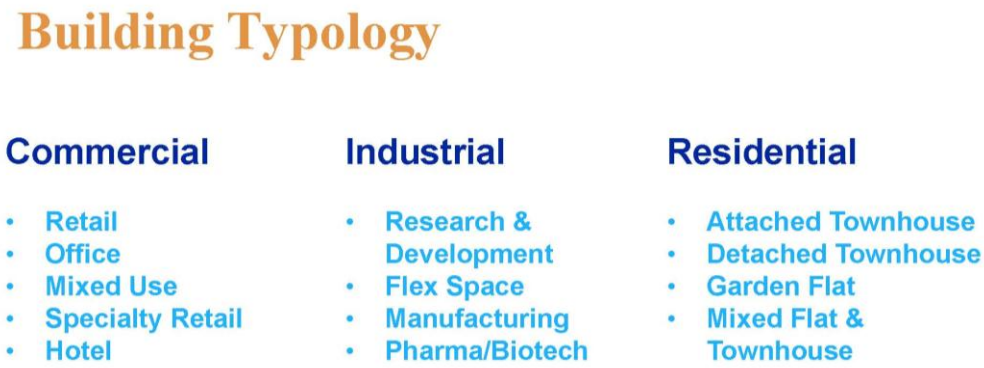
- **Buffers**. Vegetative buffers shall be provided screen and shield sensitive abutting uses.

- **Transitional Uses**. The size, scale, massing, and intensity of uses and buildings shall be arranged in such a manner so as to not overwhelm or dwarf abutting uses.

- **Limit Access Points**. As Route 109 Milford Street is a highly traveled way, it is recommended that main access to the site be provided from Trotter Lane and limit the creation of additional access points along Route 109.

3.4 Building Typology

In order to assist in the review of alternative development scenarios examples of the building typologies were prepared to provide a frame of reference for what the two dimensional shapes on the plans represented. The following pages illustrate representative building types for the range of uses under consideration;



Building Typology

Retail – Single Story Strip Center Scale

Building Typology

Retail/Office Mixed Use

Building Typology

Office – Suburban Park Scale

Building Typology

Office - Village Scale

Building Typology

Hotel/Lodging

Specialty Retail

Building Typology

Research and Development

Building Typology

Building Typology

Flex Space

Building Typology

Manufacturing

Building Typology

Pharma/Biotech

Building Typology

Attached Townhouse

Building Typology

Detached Townhouse

Garden Flats

Building Typology

Building Typology

Mixed Flats and Townhouses

3.5 Design Principles

The preparation of concept plans incorporated the following design principles:

- Avoid chaotic strip commercial appearance;
- Create a sense of place;
- Protect natural resource areas;
- Employ Low Impact Development (LID) techniques;
- Explore mixed uses;
- Promote internal pedestrian circulation;
- Respond to market demand;
- Minimize ingress and egress points;
- Transition/compatibility to adjacent uses; and
- Provide adequate but not an oversupply of parking.

3.6 Concept Plans

3.6.1 Concept 1

Concept 1 includes all the Bottle Cap lots are but does not include the NGrid property on the easterly side of Trotter Drive. On the westerly side of Trotter Drive the plan proposes smaller footprint one and two story retail and office and mixed use buildings facing Milford Street and larger office and R&D buildings in the rear. The easterly portion of the site proposes a hotel use at the intersection of Milford Street and Trotter Lane, and two large industrial buildings are sited towards the rear of the site.

3.6.2 Concept 2

Concept 2 also includes all of the Bottle Cap lots as well as the lots on the east side of Trotter Lane. The west side of the site contains a hotel at the intersection of Milford Street and a two story retail/office mixed use building on Milford Street. The balance of the westerly portion is comprised of one and two-story R & D and Office Uses. The easterly side of the site contains one story retail building on Milford Street at the intersection with Trotter Drive and the balance of the site is made up of four "L" shaped one story buildings arranged in a quad, Along the easterly edge, a medium density residential development comprised of garden flat and townhouses to provide a transitional use.

3.6.3 Concept 3A

Option 3A assumes development of the site without the participation of the out parcels. The westerly side of the site contains a hotel on Milford Street at the intersection with Trotter Lane. The balance of the westerly site is made up of four one story light industrial buildings of varying size. The easterly side contains two one

story research and development buildings and two-two story office buildings. The easterly edge of the site contains residential development made up of garden flats.

3.6.4 Concept 3B

Option 3B also is predicated on no participation from the bottle cap out parcels, but does include the NGrid parcel on Trotter Lane. The westerly side of the site is the same as in Option 3B. The easterly side includes participation of the NGrid property and proposes four-two story office buildings. The residential component remains the same as in Option 3A.

3.6.5 Comparison of Alternatives

Table 3-1 Comparison of Alternatives

Oak Grove Comparison of Alternatives						
	West		**East**		**Total**	
Concept	**Building sf**	**Parking**	**Building sf**	**Parking**	**Building sf**	**Parking**
1	280,000	810	360,000	825	640,000	1,635
2	370,000	975	320,000	680	690,000	1,655
3A	255,000	670	190,000	575	445,000	1,245
3B	255,000	670	240,000	725	495,000	1,395

Options 2, 3A, and 3B contain 75 Residential Units

As shown in Table 3-1, Concepts 1 and 2 which includes the out parcels supports the greatest amount of building area, 640,000 and 690,000 square feet respectively. Concepts 3A and 3B which do not include the out parcels contain 445,000 and 495,000 square feet respectively or about 200,000 square feet less than Concepts 1 and 2

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Figure 3-1: Concept 1

Figure 3-2: Concept 2

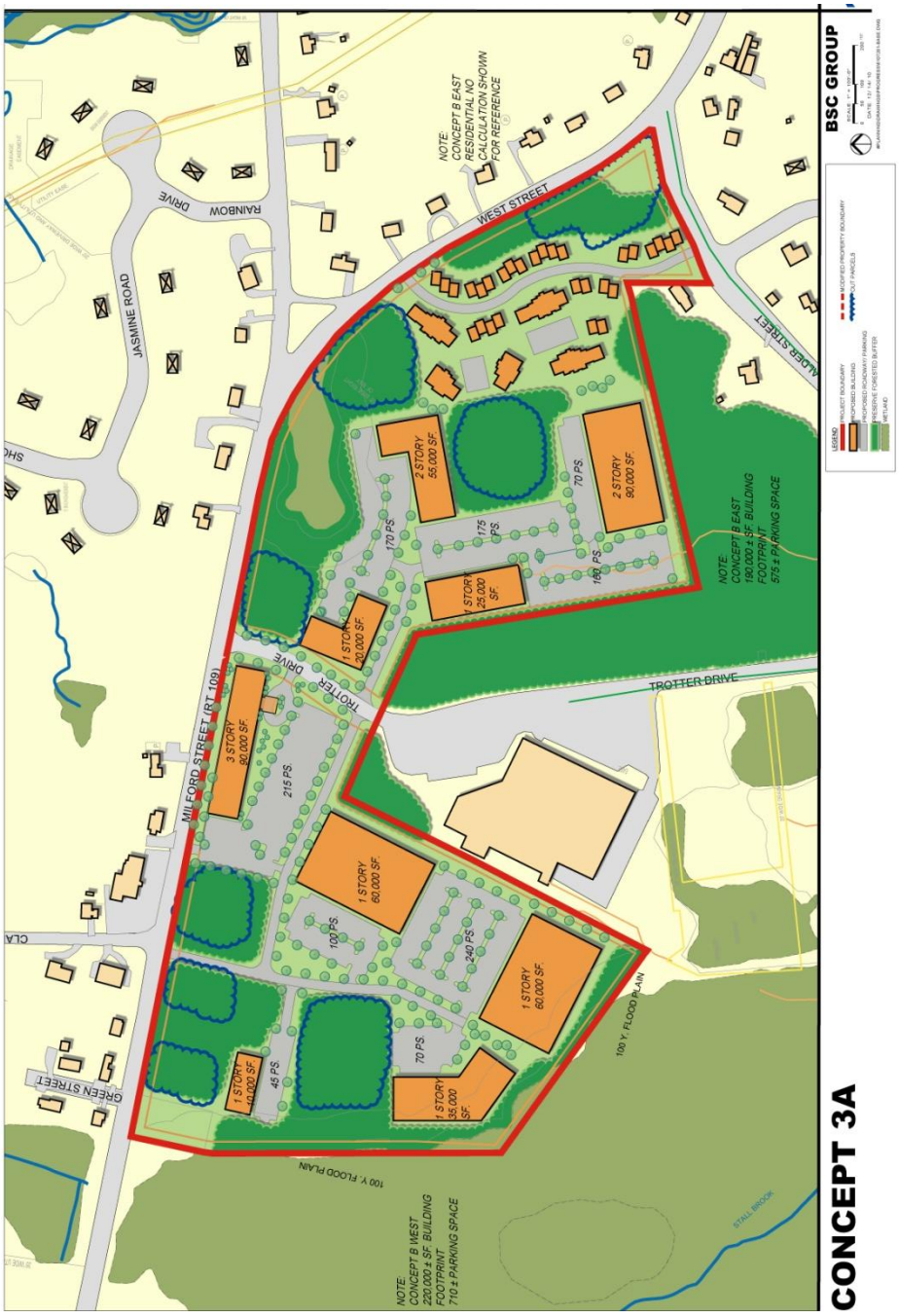

Figure 3-3: Concept 3A

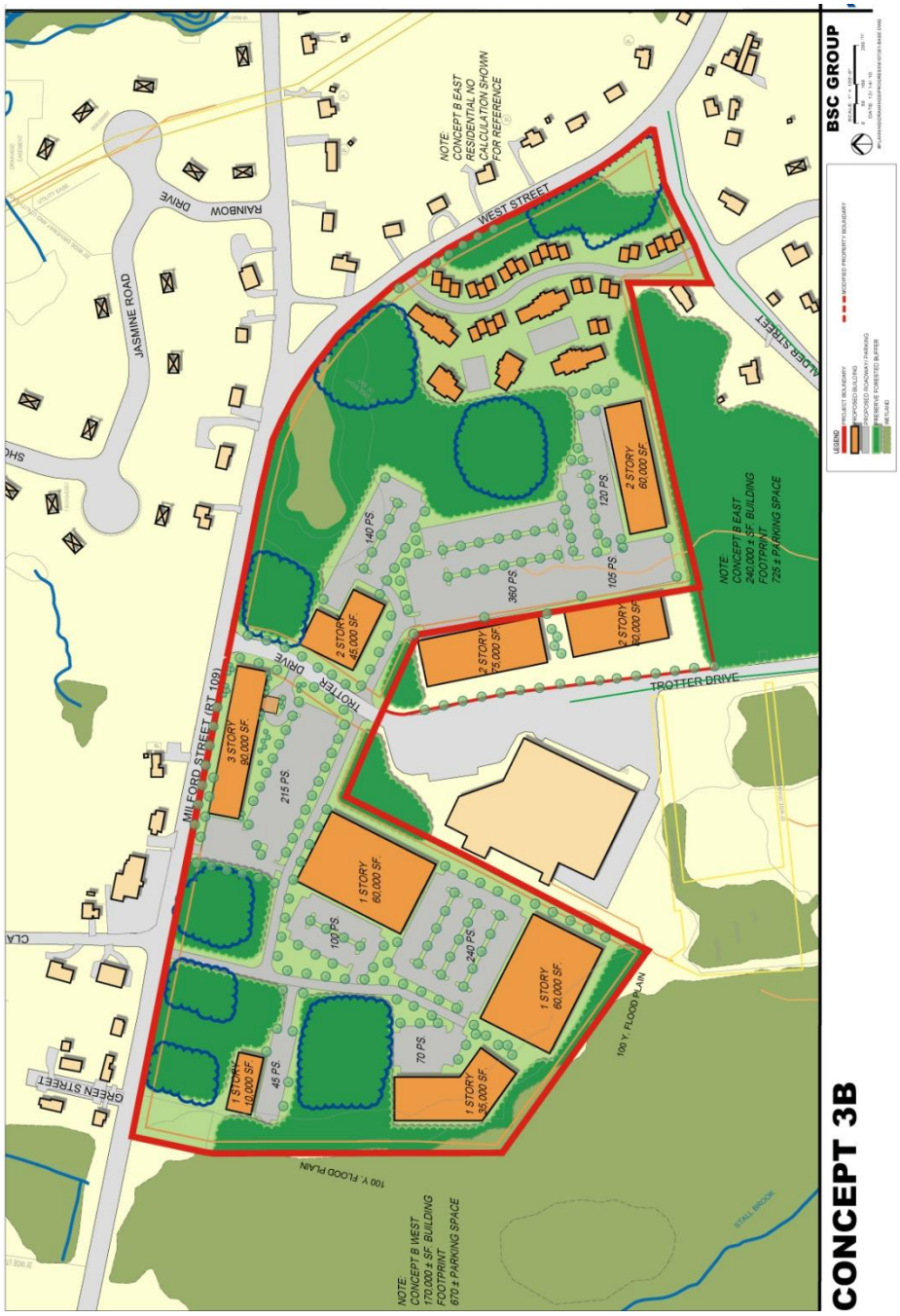

Figure 3-4: Concept 3B

Chapter 4: Preferred Plan

4.1 Preferred Plan Consideration

On March 28, 2011, the second Public Forum was held for property owners and neighborhood residents to review the proposed concept plans. At the Forum, a number of comments were made to help shape the formulation of a preferred plan. Participants offered the observations or comments listed below.

- Preserve rural character on Route 109.
- No strip Commercial Development
- Site is gateway to Medway.
- Future need for signalization and potential for Alder Street cut through.
- Potential to increase jobs and tax base.
- Set the hotel conference center away from street to offset height.
- Locate lower intensity uses and village style building to transition to residential uses.
- Incorporate Open Space and Pedestrian connectivity features.
- Incorporate appropriate Design Guidelines.
- Need for new zoning to provide flexibility and control.

4.2 Preferred Concept Plan(s)

As was the case with the alternative concept plans the preferred Concept Plans were developed assuming both no and full participation of the out parcels.

The Preferred Concept Plans as shown in Figures 4-1 and 4-2 incorporate the feedback and suggestions made at the Public Forum. Figure 4-3 depicts Preferred Concept A superimposed the lot ownership plan. The proposed hotel conference center has been set back from Route 109 to offset the height. Retail uses along Route 109 have the buildings sited close to Route 109 with parking located behind the building to eliminate the appearance of the strip commercial. The size and scale of buildings have been reduced to a village scale. The amount of impervious surface has been reduced. Pedestrian circulation and an open space elements have been introduced into both plans.

As was the case with the alternative concept plans, the potential building square footage was greater with the inclusion of the out parcels. Options A & B contain 436,000 and 631,000 square feet of building respectively. Both plans propose 75

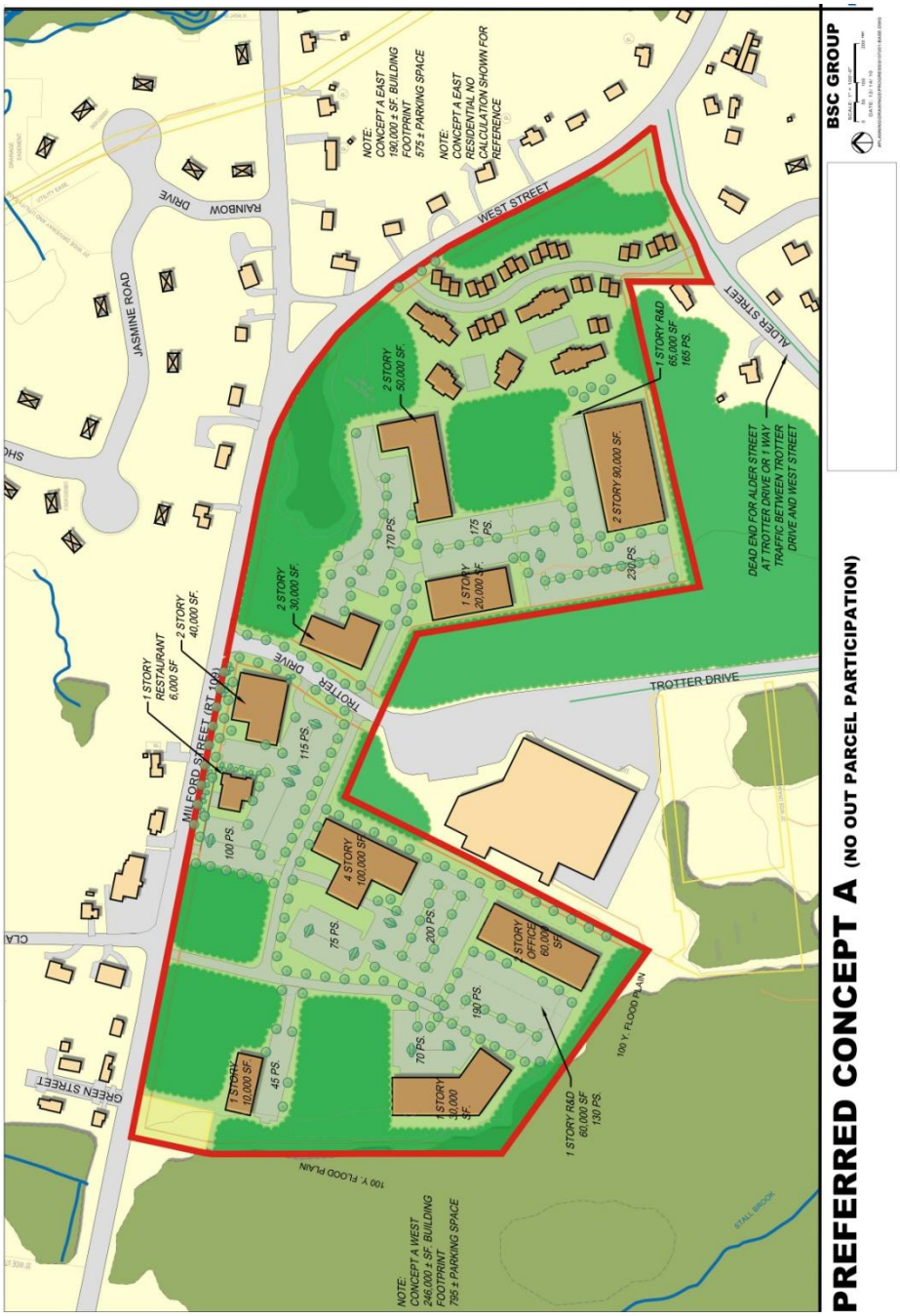

Figure 4-1: Preferred Concept A

Figure 4-2: Preferred Concept B

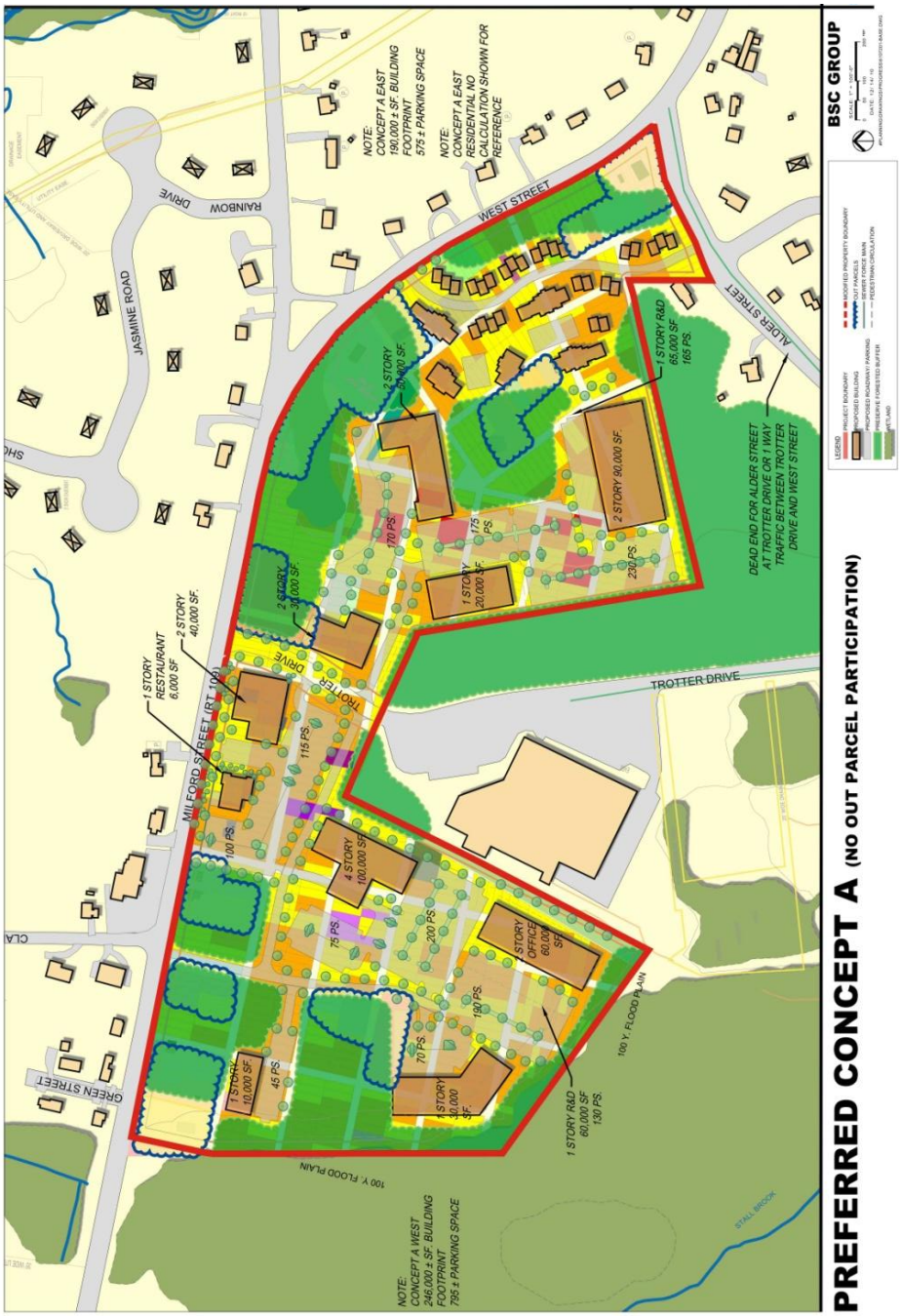

Figure 4-3 Preferred Concept B Superimposed over Ownership Plan

dwelling units on the easterly edge of the site along West Street as a transitional use to the abutting residential neighborhoods.

A full comparison of Preferred Concept Plans A and B is depicted on Table 4-1

Table 4-1: Comparison of Preferred Alternatives

Oak Grove Comparison of Preferred Alternatives						
	West		**East**		**Total**	
Option	**Building sf**	**Parking**	**Building sf**	**Parking**	**Building sf**	**Parking**
A	246,000	795	190,000	575	436,000	1,370
B	331,000	1,085	300,000	935	631,000	2,020

4.3 Regulatory Considerations

Given the size of the proposed development (500,000+/- sf), a rigorous permitting process will need to be successfully completed prior to construction. The subsections below contain a listing of the necessary permits, at a minimum, that are anticipated to be required at the local, state and federal levels.

4.3.1. Local Permits

- Conservation Commission
    - Determination of Applicability
    - Notice of Intent
    - DEP Stormwater Management
- Planning Board
    - Definitive Subdivision Approval
    - Special Permit(s)
    - Site Plan Approval
- Design Review
- Sewer Connection Permit
- Water Connection Permit
- Road Opening Permit
- Town Meeting Zoning Amendment(s)

4.3.2 State Permits

- Sewer Extension Permit Mass DEP
- Mass Highway Access Permit (Route 109)
- Mass Environmental Policy Act (MEPA)
    - Environmental Notification Form (ENF)
    - Environmental Impact Report (EIR)

4.3.3 Federal Permits

- National Pollutant Discharge Elimination System (NPDES) Permit

4.4 Community Benefits/Fiscal Impact

A preliminary Fiscal Impact Analysis was performed to forecast the financial implications of the preferred options in terms of municipal revenue and expenditures on an annual basis. A number of assumptions were made in the modeling including:

- Assessed Value of $75.00 per square foot for Commercial Buildings;
- Assessed Value of $150.00 per square foot of Residential Buildings;
- Tax Rate $17.48 per $1,000.00 of assessed valuation;
- General Government Cost/Revenue Ratio .25;
- Education Cost per Pupil $11,928; and
- School Age Children Generation from Fannie Mae Foundation Residential Demographic Multipliers for Massachusetts 2006

As shown in Table 4-2 each option would generate additional tax revenue for the Town as depicted in the total RE Tax Revenue line item. However the additional revenue does not come without additional municipal cost. The municipal costs were derived by attributing 25 percent of the total additional revenue generated toward the increase of cost for general government. This is also known as the General Government Cost/Revenue Ratio. General Government Cost/Revenue Ratios typically range between15 percent to 25 percent. Additionally residential development can be expected to generate increased education costs. The education costs were calculated by multiplying the number of residential units by the residential demographic multiplier for the unit type to determine the number of school age children that are projected. The number of school age children is multiplied by the per pupil cost to derive the additional education cost. Both Options A and B would result in an annual positive fiscal impact of $475,025 and $666,759 respectively. This represents approximately 1.25 to 1.75 percent of the annual budget for the Town of Medway

Table 4-2: Fiscal Impact Analysis

Fiscal Impact Analysis			
		Option A	**Option B**
	Revenues		
Commercial			
	Building Area	436,000	631,000
	Assessed Value	$32,700,000	$47,325,000
	Annual Property Tax	$571,596	$827,241
Residential			
	Number of Units	75	75
	Town House (1800 sf)	31	31
	Garden Flats (1200 sf)	44	44
	Assessed Value	$16,290,000	$16,290,000
	Annual Property Tax	$284,749	$284,749
	Total RE Tax Revenue	**$856,345**	**$1,111,990**
	Expenses		
	General Government	$214,086	$277,997
	Education Costs	$167,234	$167,234
	Total Costs	**$381,320**	**$445,231**
	Fiscal Impact	**$475,025**	**$666,759**

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4.5 Public Initiatives/Capital Improvements

In addition to the assemblage of the Bottle Cap properties, implementation of the development plan will require a combination of public initiatives and improvements for it to move forward. The Town has limited water and sewer capacity Unless there is an increase in the wastewater allocation to the Town or the Mass DEP groundwater withdrawal permit, additional flow will only be accommodated through I &I reductions in wastewater flow and water conservation measures. This limitation is not unique to this site and affects future development on a Town wide-basis.

Assuming the water and sewer capacity issues are resolved, water and sewer lines will need to be extended in order to provide service to the proposed buildings. It is estimated that most of the area will be able to connect to the public sewer line in Trotter Drive via gravity sewer mains. However there remains a possibility that outlying building sites may need a pump system to connect to the system. This can

be accomplished via an ejector pump for a building or if several buildings are involved a sewer pumping station.

Options A and B were conceived so development could proceed without the need for Subdivision approval. Circulation and access to the buildings is provided by a network of private internal driveways. Building lots can be created by utilizing the existing road frontage with a series of easements for access and utilities. Alternatively development without subdivision approval can be accomplished through a condominium form of ownership or if the site is developed by a single developer that leases the building space to users.

The preferred development options for the Site cannot be accommodated by existing zoning. The mix and integration of the proposed uses will require a zoning strategy that allows the proposed uses and dimensional flexibility that provides development standards and a predictable and transparent permitting process.

4.6 Funding Consideration

The next Section explores the implementation pathways that may be available to pursue for the development of the proposed business park. A common theme with all of the development pathways is the capital requirements to move forward with the project. Some of the strategies and funding options to be considered are listed below.

- Property owner's equity participation in exchange for contributing land to project the Town will assume all development costs and owners will be compensated upon development and sale of property. Also known as a "installment' or "take down" purchase;
- Mass Urban Renewal Program;
- MassWorks Economic Development Program;
- Mass Industrial Finance Agency Bonds;
- District Improvement Financing;
- US Department of Commerce Economic Development Agency.

Chapter 5: Implementation Strategy

Moving this project forward will require a substantial effort before the first shovel is put in the ground. Grant opportunities need to be researched and proposals written. Negotiations with the land owners need to be conducted to obtain the appropriate level of site control. Additional preliminary work need to be conducted to determine if the proposed development vision for the Site will have the municipal regulatory support to justify moving forward. The key launch challenge is getting through the start up phase described below. The Town lacks the development expertise and has limited financial resources. Securing the appropriate development expertise is vital.

5.1 Development Approach

There are four potential approaches to project implementation and execution. Each approach has some distinct advantages and disadvantages. The approaches are:

- The town serves as developer by adding internal development capacity (see Table 5-1).
- Developer RFP/RFQ process (see Table 5-2):
    - The town retains development rights and hires a developer on a performance fee basis to execute project; and/or
    - The Town partners with "at-risk" master developer.
- Property owners form a development company and develop property (see Table 5-3).
- The Town assembles and markets sites without improvements (see Table 5-4).

The advantages and disadvantages of each approach are noted in Table 5-1 through 5-4, as referenced above.

Table 5-1: The Town Serves as Developer

ADVANTAGE	DISADVANTAGE

▪ Town of Medway has complete control of the project:
  ▪ The design
  ▪ The final product
  ▪ The tenants
▪ Federal government assistance is easier to secure
	▪ Must build a staff
	▪ Town of Medway will require an initial operating subsidy while grant monies are secured to staff development capacity:
	▪ Subsidy from town may be an ongoing requirement
	▪ Development capital will need to be provided by Town of Medway and/or town
	▪ Own all the development risk most notably financial and absorption risk

Table 5-2: Developer RFP/RFQ

ADVANTAGE	DISADVANTAGE

▪ Town of Medway can share or shift the development risk of project
  ▪ Financing and absorption risk can be shared or shifted depending on the model
  ▪ It is advised that the Town of Medway consider retaining site assembly and permitting risks
▪ Under a shared development model federal financing can be more easily secured
  ▪ Typically a nonprofit or government agency is required to be the recipient of the funds
	▪ Less control over the project
	▪ In a partnership model Town of Medway will still require an initial operating subsidy but probably less than a "go-it-alone" model
	▪ There may be little to no response to an RFP/RFQ
	▪ Site control before issuing RFP/RFQ preferred to help scope the development agreement and entice developers

Table 5-3: Property Owners Develop Property

ADVANTAGE	DISADVANTAGE
▪ Town of Medway chooses its role and method of support to the project ▪ Town of Medway and town retain no development risk other than potential tenants	▪ Startup capital issues ▪ Town has limited control over actual development ▪ Risk of "one-off" land sales making an integrated park difficult to develop ▪ Federal funding can be more difficult to access

Table 5-4: The Town Assembles and Markets Sites

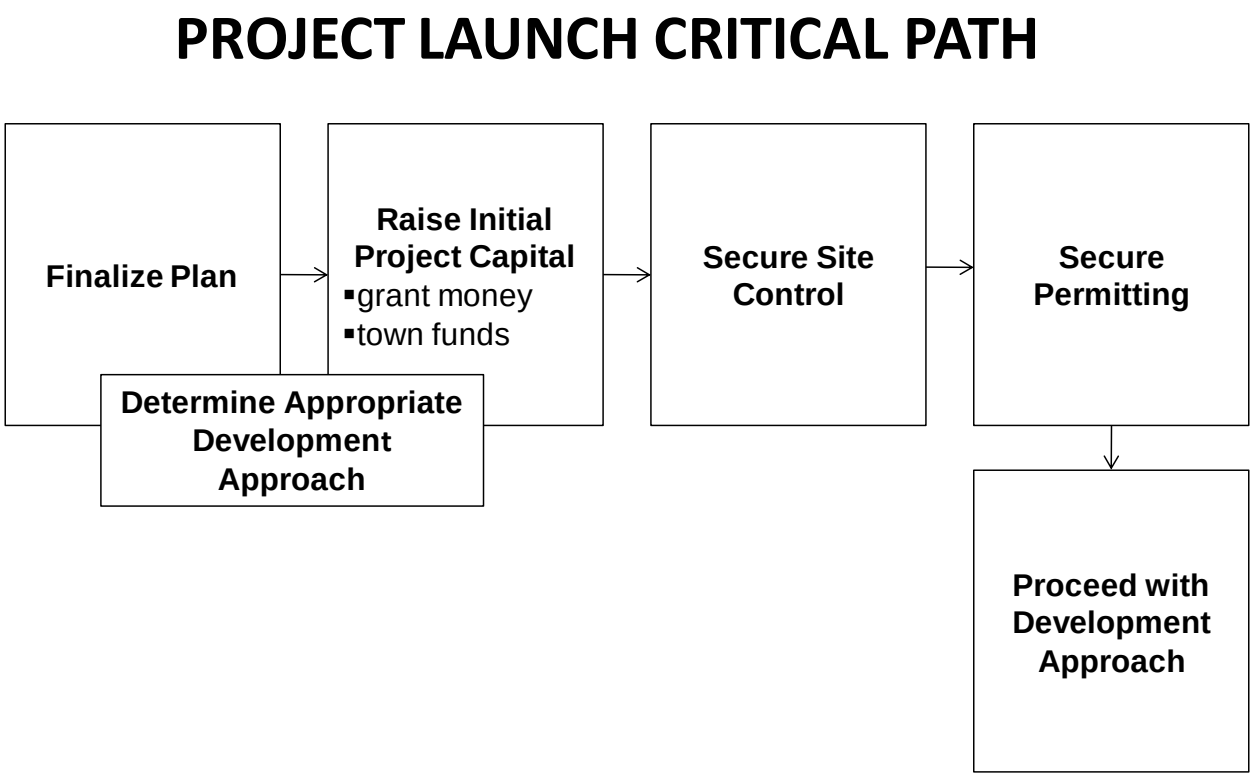
ADVANTAGE	DISADVANTAGE
▪ Upfront costs are limited to land acquisition costs ▪ Quickest way to the market place for Town of Medway ▪ Provides an interim step that keeps full development an option	▪ Absorption risk can be substantial due to competitive products in region being "pad ready" ▪ Permitting risk ▪ May not lead to actual development but land banking by speculators

Regardless of development approach, it is recommended that the Town move the project forward in at least two areas if they decide to pursue the development of the Park: site assembly and regulatory permitting. This approach would be valuable for two reasons: 1) determining the site assembly expense, and 2) determining regulatory permitting certainty from the onset provides an answer to major implementation risks. If land assembly becomes too expensive or regulatory issues constrain site development the project may not be worth pursuing. On the other hand if neither aspect turns out to be an issue, then a key risk factor for a developer – site risk – has been eliminated.

Another potential option on moving forward is to consider how to phase the project particularly if "equity" is difficult to obtain or ease of site assembly including right-of-ways proves to be complex. This could have the advantage of generating revenue for the Town without major infrastructure development costs.

Therefore, as shown in Figure 5-1, the critical path for this project flows as follows:

Figure 5-1: Project Launch Critical Path



5.2 Land Assemblage

A significant task associated with the development of the Oak Grove bottle cap lots is the assemblage of the parcels. The two preferred Plan Options reflect the development potential of the Site with and without the participation of the out parcels. Land pooling is an innovative land assemblage alternative to outright public acquisition. It provides a participation structure whereby the property owners agree to contribute their property in exchange for a proportionate share of the development entity. Each participating property owners share is determined by the relative value of the real estate contribution. Figure 4-4 outlines the critical steps involved in Land Pooling. Alternatively the other options for assemblage involve the outright acquisition or securing the rights for acquisition, which increases the upfront financial requirements.

5.3 Decision to Proceed

After selection of the preferred Development Option and careful consideration of the contents of this report and associated deliberations, the Town of Medway should decide whether or not to proceed with the Project. Is the potential benefit to the Town sufficiently compelling to undertake the project and its inherent risks? Does the Town possess the necessary resources and capabilities for such an undertaking? There are a number of uncertainties for which resolution is critical in order for the project to move forward. Examples include parcel assemblage, financing, and permitting. The decision process may be bifurcated into two steps: near term/low cost efforts and longer term/significant cost efforts, thereby allowing resolution of uncertainties prior to making major capital commitment. Please note however, that market risk is always an inherent and unknown factor of all real estate development,

Figure 5-3: Action Plan identifies the major tasks involved in moving forward and offers an estimated timeline. Below is a narrative description of each major task included in the Action Plan.

5.4 Determine Development Approach

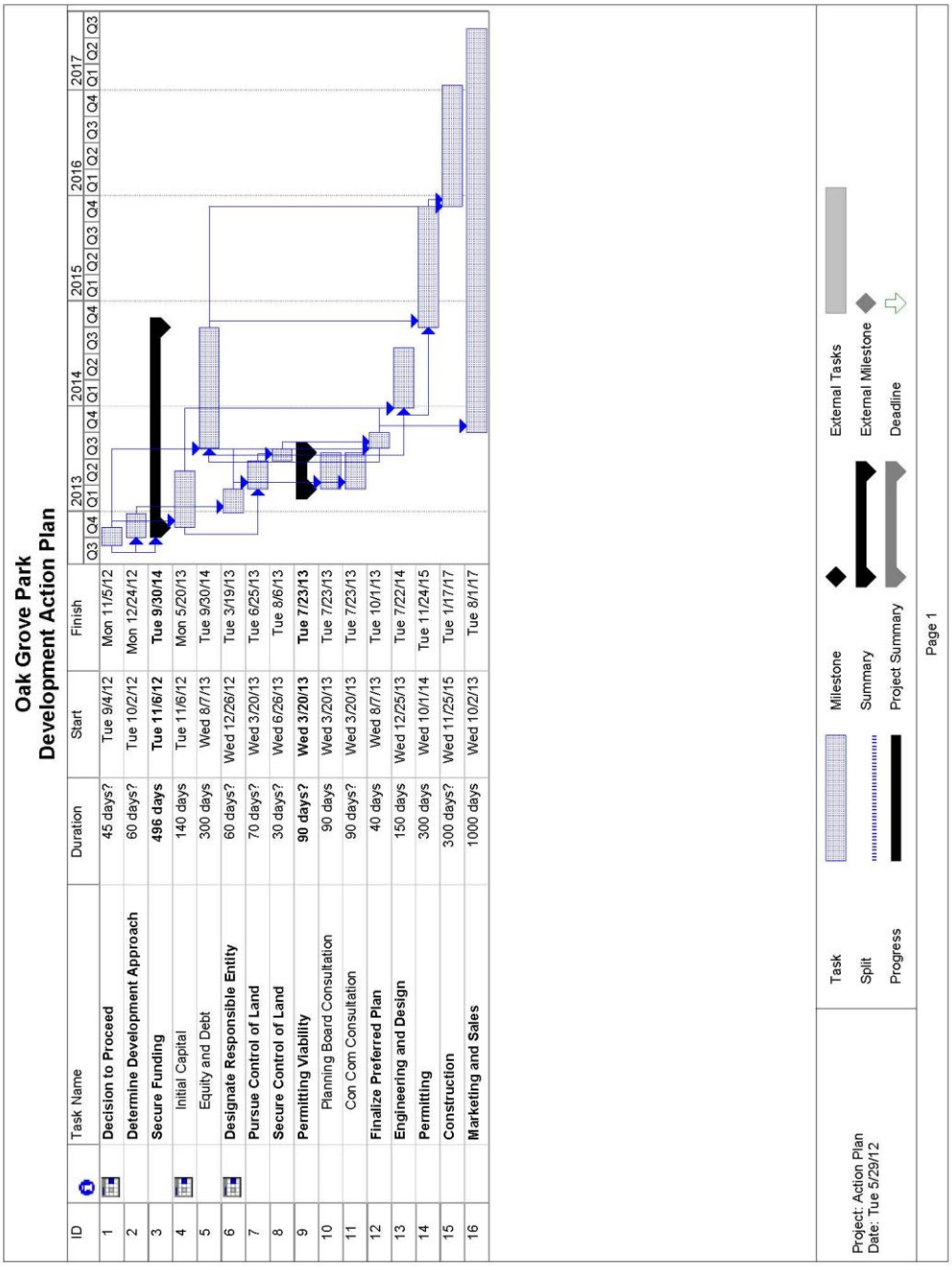
As noted in this Chapter, there are four development approaches available for the Town to implement the project. The common element with all the approaches is to secure the requisite development expertise and acumen to manage the project.

5.5 Secure Funding

BSC/Ninigret estimates the initial seed funding necessary is estimated to be approximately $150,000 to $200,000. This funding will underwrite the costs associated with control of the property including: schematic design/permitting; project management; and legal fees. Development equity and financing will follow upon completion of the preliminary steps, and will fund the costs of engineering, design, permitting, land acquisition, project management, and construction.

Figure 5-2: Land Pooling

Figure 5-3: Action Plan



5.6 Designate Responsible Entity

Concurrent with the initial funding to proceed and the identification of a development approach, the Town should commence its search for the development expertise to manage the various components of the project, i.e., the "Responsible Entity." The Responsible Entity will be the point or contact person responsible for implementing all phases of the project: negotiating land acquisition; overseeing engineering, permitting, and construction; and marketing the project.

5.7 Pursue and Secure Control of the Land

Approaching the property owners and commencing negotiations for the sale of their property is one of the first orders of business to be undertaken. It is recommended that the Town gain control of the property via land pooling or option agreements which will give the Town the right to purchase the property for an agreed-upon price within an agreed-upon period of time in exchange of a payment to the property owner. Under an option agreement, the Town will have time to further evaluate the project viability (preliminary permitting, project financing) without committing to the full purchase price of the land. The option amount paid to the owner, however, is non refundable.

5.8 Permitting Viability

As noted in this report, there are a number of site and plan considerations which require further evaluation and determination with respect to securing permits and approvals. Specifically the Conservation Commission, the Planning Board, and Town Meeting need to be consulted to fully understand the issues associated with proposed development. The Conservation Commission input on the resource areas subject to their jurisdiction needs to be established. Issues relative to Zoning Amendments, Special Permits, Site Plan, and Design Review approvals should be reviewed by the Planning Board. Additionally during this period other local, state and federal permits and authorizations should be explored to identify any serious issues or concerns.

5.9 Finalize Preferred Plan

After completing the permitting viability, the Town will be in a position to finalize the development plan for the Site. If the owners of the out parcels decide not to participate, Option A is the Preferred Plan. If the owners of the out parcels decide to participate, Option B is the Preferred Plan

5.10 Engineering and Design

Design and Engineering for the Preferred Plan selected will involve preparation of the plans, construction details, including traffic studies and drainage analysis and storm water management, and supporting documentation necessary to fulfill the application requirement for all permits and approvals.

5.11 Permitting

Applications shall be submitted to the responsible board, commission or agency for review and approval. Typically, this process involves numerous public meetings and

outreach to the public to assuage their concerns. Certain permits such as proposed zoning amendments and the Environmental Review under MEPA may be filed before detailed engineering plans are completed.

5.12 Construction

The Town will be responsible for the construction of the roads, utilities, and infrastructure necessary for site development. This will include the extension of sewer service to the site and possible upgrade of water service to the site. It may be advantageous utilize a phased approach to implanting infrastructure improvements to minimize the initial capital outlay.

5.13 Marketing and Sales

It is anticipated the project will consist of 10 to 13 building pads and have an absorption rate of one per year. It is conceivable Marketing and Sales could last in excess of 10 years. There is potential that sales of properties with frontage along Milford Street could occur prior to final design and engineering and construction. This may require a Phase 1 Waiver from MEPA to allow limited initial development to proceed in advance of completion of the state's environmental review process if an EIR were to be required.

5.14 A "No Go" Decision

In the event the Town of Medway chooses not to pursue the development of the Oak Grove Park, what will happen to the site and what, if any, tools are available to the town to shape its future? As the site is mostly vacant land and a portion zoned for light industry, it is very likely that some form of development will take place in the future. Such a development will be organic in nature performed by private parties in response to market forces.

The Town of Medway will retain certain controls over new development as it has significant ownership of the parcels and through its Zoning By law which will require zoning map amendments to accommodate non single family development that will require site plan approval and/or special permits for most uses in the Light Industrial district. It may be possible through the site plan/special permit process to provide for future access to the landlocked parcels; however, such a requirement would need to be carefully crafted to avoid any semblance of a public taking. While there is public water available to the site, public sewer is 300 +feet to the south of the site and will require an extension. Without public sewer, the development is limited by the capacity of onsite septic. There if a private large scale development proposal comes forward the Town of Medway is in a position to leverage greater control over site development.

The site contains multiple individual owners and two major owners, the Williams family and the Town of Medway which represents the majority of the Site's land area. It is conceivable development initiatives may orchestrate limited land assemblages to undertake development projects. Such developments should be evaluated in the context of the overall master plan. Individual developments should not stifle further development potential or violate a coherent overall development scheme