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Land Use Laws and Policies Route 146 Corridor Overlay Districts

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The Center for Economic Development at the University of Massachusetts, in Amherst, is part of the Landscape Architecture and Regional Planning Department, and is funded by the Economic Development Administration of the U.S. Department of Commerce, and the University of Massachusetts.
The following is the proposed Route 146 Highway Corridor Overlay District ("146 HCOD") Bylaw. It establishes a zoning district on Route 146 through the Town of Millbury, approximately 4 miles in length, beginning where Route 146 and the Massachusetts Turnpike intersect and extending south to the intersection of Elmwood Avenue and Route 146.

The purpose of the Bylaw is to: provide for orderly development that is conducive at highway interchanges; encourage economic growth while avoiding serious negative effects locally and in the region by encouragement of the most appropriate use of adjacent corridor lands; maintain the scenic natural and historical features of the area; and maintain the safe, efficient movement of traffic throughout the corridor by the orderly development of the land, in order to promote the health, safety, and general welfare of present and future generations of Millbury citizens.

The development patterns along the corridor would support this stated Bylaw purpose. Development would occur in varying size nodes or clusters along the highway, thus decreasing the appearance of a commercial strip and alleviating excessive traffic congestion. Building could occur in varying size nodes. Node Classification I would contain a minimum lot area of 16 contiguous acres. Node Classification II would contain a minimum lot area of at least 8 contiguous acres but not more than 16 acres. Node Classification III would contain a minimum lot area of at least 4 contiguous acres but not more than 8 acres. Parcels of land less than 4 lot area acres would not fall into a Node Classification and would have the underlying uses available.

The node or clustering component of the Bylaw is essential. It is one of the key mechanisms which will allow Millbury to plan development in an orderly manner along the 146 HCOD. Another key component of the Bylaw is the 60% open space requirement for each building site. This requirement will help prevent an overbuilt site and help maintain the natural features along the highway. Designated open space would not include driveways, or parking areas. The open space would be used to maintain and/or create and enhance the entrance to Millbury and to the Blackstone Valley. Open space land that abuts or is in close proximity to adjacent open land or other permanently protected open space could be connected to create trailways, bicycle paths, or scenic vistas.

Traffic safety concerns are addressed in the Bylaw. Direct access from the highway to parking areas in any node is prohibited. Frontage or access roads are mandatory. Roads connecting nodes are strongly encouraged. These measures will greatly decrease the amount of turning onto and off of the highway, which will result in a safer traffic pattern.
The topography of the area is addressed in the Bylaw. The steepness of some sections of the land requires mechanisms to safeguard against erosion, stormwater runoff, and environmentally unsound changes in the slope of the land. Trees greatly aid in diminishing the amount of erosion. Tree protection mechanisms through limitations on removal and clear-cutting are included.

Design standards for parking lots will prevent the creation of a "sea of asphalt" by having planting requirements. A range of flexible dimension standards addresses the requirements for front, side, rear yards and building heights.

The application process itself encourages increased communication with the Planning Board during the initial phases. A conference between the developer and the Planning Board is required before any plan is submitted. The initial meeting is intended to encourage imaginative and creative land uses planning, which will protect Millbury's landscape, topography and natural resources while encouraging managed economic growth. Following this meeting a concept plan would be submitted addressing the general features of the land and giving approximate configurations of the lots and roadways. The plan would be discussed and modified accordingly by the Planning Board. A preliminary and then a definitive plan would follow.

It is the intent of this Bylaw to combine landscaping, environmental concerns, grading, loading and sign controls with the other mechanisms described in this Bylaw to aid Millbury in establishing a well planned corridor that balances economic development with Millbury's natural environmental features, town character, history, and its traffic and safety concerns.
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SECTION 1.0: PURPOSE

The purpose of the Route 146 Highway Corridor Overlay District (the "146 HCOD") is to: provide for orderly development that is conducive at highway interchanges; encourage economic growth while avoiding serious negative effects locally and in the region by encouragement of the most appropriate use of adjacent corridor lands; maintain the scenic natural and historical features of the area; and maintain the safe, efficient movement of traffic throughout the corridor by the orderly development of the land, in order to promote the health, safety, and general welfare of present and future generations of Millbury citizens.

SECTION 2.0: LOCATION

The 146 HCOD establishes an overlay zoning district on Route 146 of approximately 4 miles beginning where Route 146 and the Massachusetts Turnpike intersect and extending south to where Elmwood Avenue and Route 146 intersect. The exact location shall be determined by the official map called "ROUTE 146 HIGHWAY CORRIDOR OVERLAY DISTRICT". This map will not act to rezone parcels unless they apply under the overlay district regulations.

SECTION 3.0: CLASSIFIED USES

All uses within the 146 HCOD shall be subject to the use limitations as described in sections 3.0 through 3.5 of this Bylaw. All uses exclusively permitted shall be permitted only where incorporated into a coordinated development with an aggregate lot area so designated by the Node Classification chart.

SECTION 3.1: NODE CLASSIFICATION I

Node Classification I shall be any parcel in the 146 HCOD which contains a minimum lot area of 16 contiguous acres.

USES PERMITTED BY SPECIAL PERMIT

- Non-profit club or lodge
- Public utility without service yard
- Residential social service facility
- Research and Development
Car washes
- Outdoor or underground storage or disposal of engine lubricants, coolants and antifreeze
- Restaurants with drive thru service and/or counter service

SECTION 3.3: NODE CLASSIFICATION III

Node Classification III shall be any parcel in the 146 HCOD which contains a lot area of 4 contiguous acres.

USES PERMITTED BY SPECIAL PERMIT
- Restaurant; except the use of drive up windows and/or counter service
- Municipal uses
- Research and Development
- Personal services

PROHIBITED USES
- Trucking terminals
- Commercial or institutional laundries or dry cleaning facilities
- Outdoor or underground storage or disposal of engine lubricants, coolants and antifreeze
- Restaurants with drive thru service and/or counter service

SECTION 3.4: USES ALLOWED BY RIGHT (Node or underlying)

- All uses permitted by right in the underlying Industrial I zone

If there is no Node application, then the underlying uses will be permitted.

SECTION 3.5: MIXED USE

A concentration of complementary land uses that combine uses in a compact area, in one or separate structures on the same Node, are strongly encouraged. These uses would be physically integrated by road and pedestrian systems.

SECTION 4.0: OPEN SPACE

In reviewing the appropriateness of the open space, the Planning Board shall consider the following criteria. The extent to which environmental features (including, but not limited to wetlands, streams, other water bodies, and wildlife habitats) are protected, open space areas should be provided in large expanses, avoiding small strips and areas unless there are reasons for these strips caused by physical site features. Whenever possible, open space should
structures or other side appurtenances. Except in areas where terracing is used, when excavation is necessary, grading shall be done in such a way that the resulting contours follow in smooth natural curves that conform to the curves of the surrounding landscape. Straight or angular slopes or cuts which interrupt natural topography shall not normally be allowed.

SECTION 8.2: CHANGES IN TOPOGRAPHY

Abrupt changes in topography near lot lines which might otherwise result in excessive water runoff, erosion, or hazards shall not be allowed in excess of the following conditions, except by special permit:

a. Where adjacent lot is lower in elevation than the lot for which permit is sought, no slope or terrace exceeding 50 percent slope and five feet difference in elevation shall be allowed within 25 feet of the lot line.

b. Where the adjacent lot is higher than the elevation of the lot in question, no slope or terrace exceeding 50 percent slope and five feet difference in elevation shall be allowed within ten feet of the lot line.

c. Retaining walls of design and construction approved by the Planning Board and not exceeding 12 feet in height, may be built on lot lines, but only where there is not sufficient room to utilize properly stabilized slopes.

d. Means for preventing erosion during construction shall be specified to the satisfaction of the Planning Board on plans submitted for building and special permits.

e. Upon completion of grading and replacement of topsoil, all slopes shall be stabilized by adequate groundcover or other approved means to prevent erosion and to retard excessive runoff. The following guidelines are recommended:

Slopes greater than 35 percent should be avoided in most cases; slopes between 30 percent and 35 percent, riprap or terracing should be used; slopes between 20 percent and 30 percent, sod, or established vegetation or seedlings in association with webbing material placed over the soil; slopes between 4 percent and 20 percent, plant seed in association with fiber mulch placed over the soil, or gravel.

f. Topography which slopes from one lot across another shall be graded so as to minimize runoff directly onto lower lots. In no case shall conditions be created which channel excessive amounts of surface drainage directly onto major yard spaces or buildings on lower lots.
Node III a minimum of 4 contiguous lot area acres

Minimum lot frontage: 150 feet

All Nodes side yard: 0-100* feet as determined by site plan review

All Nodes rear yard: 0-100* feet as determined by site plan review

All Nodes front yard: 50 foot setback, excluding access road

Minimum open space: 60%, excluding parking.

Maximum lot coverage: 30%

*Except as described in Section 5.0: Buffers

Floor-to-Area Ratio/Maximum Building Height:

<table>
<thead>
<tr>
<th>Classification</th>
<th>F.A.R.</th>
<th>Floor Story Limit</th>
<th>Height</th>
</tr>
</thead>
<tbody>
<tr>
<td>Node I</td>
<td>4.0</td>
<td>14</td>
<td>140 feet</td>
</tr>
<tr>
<td>Node II</td>
<td>3.0</td>
<td>10</td>
<td>100 feet</td>
</tr>
<tr>
<td>Node III</td>
<td>2.5</td>
<td>8</td>
<td>80 feet</td>
</tr>
</tbody>
</table>

SECTION 10.0: PERFORMANCE STANDARDS

SECTION 10.1: VIEW OF HIGHWAY

Large work area doors or open bays shall not open toward or face the highway. Heating, ventilating, and air conditioning equipment, duct work, air compressors, and other fixed operating machinery shall be screened from view and where possible, will not be visible from the highway.

SECTION 10.2: BUILDING MATERIALS

Buildings shall be designed to use, to the greatest extent feasible, building material that are compatible with the surrounding environment, such as rock, stone, brick, and wood. Mirrored glass with a reflectance greater than 20 percent is prohibited.

SECTION 10.3: UTILITIES

All utility lines such as electric, telephone, or other similar lines shall be installed underground. This requirement shall apply to lines serving individual sites as well as to utility lines necessary within the project. All junction and access boxes shall be screened with appropriate landscaping. All
f. No landscaping island shall be less than 10 feet wide. No landscaping strip separating parking bays shall be less than 8 feet wide. Only hardy ground cover or mulch shall be placed within a 2-foot area under any potential car overhang, to avoid the burning of landscape plantings. In no case shall a tree be set back less than 4 feet from paved areas.

g. The Planning Board encourages the use of large planting islands (over 600 s.f.) to be located throughout the lot and planted with shade trees, low shrubs and/or ground cover.

h. Where quality woodland exists, the Board requires that it be preserved in the prescribed buffer areas along the perimeter of the lot, and additional evergreen shrubs shall be required, if needed.

i. Shade trees refer to a species of tree that normally grows to a mature height of 40 feet or more.

SECTION 12.0: SIGNAGE

Any exterior sign or advertising device hereafter erected or maintained, must, unless expressly provided, conform to the following restrictions within the 146 HCOD:

a. Any traffic, informational or directional sign owned and installed by a governmental agency shall be permitted.

b. No private sign shall be placed on a public property.

c. Signs necessary to warn of hazards or to post land shall be permitted as required to accomplish these purposes.

d. Letters shall be carefully formed and properly spaced, to be neat and uncluttered. Generally, no more than 60% of the total sign area shall be occupied by lettering.

e. Sign materials should be durable and easy to maintain. Signs may be constructed of wood, metal, slate, marble, gold leaf, glass, canvas, stained glass, or encased in a wooden frame.

SECTION 12.0.1: PLACEMENT STANDARDS/SIGN HEIGHT

a. Signs shall not be mounted on roofs or extend above the roof line.
3. The sign shall be removed by the owner or agent within 30 days of rent, sale, or lease.

c. A maximum of 2 political signs per lot are allowed, provided each sign does not exceed 2 and 1/2 s.f. in area. Political signs shall be displayed no earlier than 30 days prior to a voting day, and shall be removed within 10 days after a voting day.

d. A special event sign is a temporary sign that is used in connection with a circumstance, situation, or event that is expected to be completed within a reasonably short or definite period. Special event signs shall be permitted provided:

1. A maximum of 1 temporary sign per lot is erected.
2. Such signs may not exceed 10 s.f. in area.
3. Such signs may be erected no sooner than 14 days before the event and must be removed not later than 14 days after the event.

SECTION 12.0.5: ENTRANCE/EXIT SIGNS

a. Signs shall be a maximum of 4 s.f.

b. One such sign per driveway is permitted.

c. Signs must be placed so as not to interfere with site distances.

SECTION 12.0.6: MAINTENANCE/REMOVAL

Every sign shall be maintained in good structural condition at all times. All signs shall be kept neatly painted, including all metal parts and supports.

A development plan drawn to scale showing drainage, significant natural features, access, including access to major arterials, arrangements, uses, and dimensions of buildings, parking and loading, landscaping, walls and fences, open space, setbacks, and existing adjacent land uses of abutting property.

Developers requesting approval for residential projects with 50 units or more, or commercial projects with over 10,000 s.f. within the highway corridor district shall submit, as part of the application for the development plan, an approved traffic impact statement for the proposed development. The statement shall provide data on the traffic generated by the proposed development. Using existing traffic counts generated by CMRPC and other sources, the statement shall also show the traffic impact on the towns relevant traffic network. The relevant traffic network includes all the subcollectors and collectors from the point of the origin at the proposed
they are displayed, any frame around the sign, and any "cutouts" or extensions, but shall not include any supporting structure or bracing. In computing the area of signs, one side of back-to-back signs shall be included.

SECTION 12.2: PROHIBITED SIGNS

a. For any one sign, including frame and poles, there shall be no more than three colors and no more than two lettering styles.

b. Flashing signs, roof signs, signs containing moving parts, and signs containing reflective elements which sparkle in the sunlight are not permitted. Signs indicating the current time and/or temperature are permitted providing they meet all other provisions of this bylaw.

d. In no case shall any sign exceed 60 s.f.

e. Three-dimensional signs are not permitted.

Additional signage requirements shall be determined using the criteria listed in the 146 HCOD Site Plan Review procedures.

SECTION 13.0: TREE PROTECTION

Removal of endangered or valued trees will not normally be permitted. Trees included in this category are:

American Elm (Ulmus americana)
Laurel Oak (Quercus laurifolia)
Live Oak (Quercus virginiana)

Considerable damage to or the death of trees may result if more than 6 inches of soil is added around the base of a tree, more than 30% of circumferential bark is removed or more than 30% of the root system is removed. In addition, asphalt paving, building construction, and soil compaction too close to trees may cause their destruction. Accordingly, it shall be the responsibility of the developer to institute alternative site designs to assure the best chance of tree survival whenever these criteria cannot be adhered to.

Those trees designated for preservation in accordance with the provisions of this ordinance as shown on the approved Landscape Plan shall be marked with bright blue ribbons encircling the tree trunk at a height of 4 feet above the ground, and a 4-foot high barricade will be constructed around the tree at the drip line prior to the start of construction.

As a condition of approval under this ordinance, the applicant may be required to plant replacement trees for trees approved for removal as part of
The requirement for a tree survey is waived when preliminary site evaluation by the applicant reveals the ability to accomplish the proposed project without removal of any trees 8 inches in diameter or larger. The applicant shall submit a written statement that no trees will be removed, and his permit will indicate No Tree Removal as a condition thereof.

SECTION 14.0: CHILD/ELDERLY DAY CARE SERVICES

A licensed day care facility shall be permitted as a special permit use in the 146 HCOD provided that the Building Inspector is provided with a copy of the license to operate.

All buildings constructed with more than 50,000 s.f. shall designate 2% of that floor space for a child day care facility.

A combination of child/elderly day care services may be provided in buildings constructed with more than 50,000 s.f. if a need is documented by the community and/or regional Elderly Affair Commission. Elderly day care shall not exceed 40% of the child/elderly day care mix.

SECTION 15.0: APPLICANT PROCEDURES

1. The parcel shall be in single or consolidated ownership at the time of application and shall have the minimum acreage stipulated for the type of Node Classification.

2. A site plan shall be presented for the entire parcel, and shall be subject to approval by the Planning Board.

3. Uses shall be contained in one continuous building except that groupings of buildings may be allowed by the Planning Board where such groupings are consistent with the safety of the users of the development and are further consistent with the overall intent of this Section.

4. The development shall be served by a public/private water system, adequate in terms of fire protection and domestic use.

5. A common architectural theme shall be reflected in the buildings by means of building materials, architectural style, sign controls and color coordination. Elevations of all proposed structures shall be in keeping with the historic, cultural, and natural environment character of Millbury and the Blackstone Valley and shall be prepared by an architect registered in Massachusetts showing building materials and colors.
SECTION 15.3: SITE DESIGN

A site design plan prepared by a registered landscape architect or architect, registered in Massachusetts, accompanied by the proper engineering and land survey documentation prepared by a Massachusetts registered engineer and land surveyor shall contain the following information. (The information need not be on a single sheet of paper.)

SECTION 15.4: SUBMITTAL PROCESS

The applicant for a professional building or mixed development special permit shall first submit 15 copies of a plan and application. All applications for a special permit under this Section shall be referred by the Planning Board to the Board of Health, Conservation Commission, Building Inspector, Fire Chief, Police Chief, Highway Surveyor, Board of Selectmen, and other board/agency/department for its review and comments within 14 days of its submission to the Planning Board. Any such board or agency to which applications are referred for comment shall make its recommendations and send copies thereof to the Planning Board and the applicant within 35 days of receipt of the referral request from the Planning Board or there shall be deemed no opposition or desire to comment. The Planning Board shall not act upon said special permit until either comments from referred boards or agencies have been received, or said 35 days from referral request have elapsed, whichever is sooner. In reviewing the request, the Planning Board shall determine if the development meets the standards described in the 146 HCOD Site Plan Review.
from the 146 HCOD shall be reduced so as not to exceed the residential/suburban standard.

SECTION 16.5: EROSION CONTROL

Erosion of soil and sedimentation of streams and waterbodies shall be minimized by using the following erosion control practices:

a. Exposed or disturbed areas due to stripping of vegetation, soil removal, and regrading shall be permanently stabilized prior to occupancy of a structure, or a performance guarantee in place which guarantees stabilization within 12 months of occupancy.

b. During construction, temporary vegetation and/or mulching shall be used to protect exposed areas from erosion. Until a disturbed area is permanently stabilized, sediment in runoff water shall be trapped by using staked haybales or sedimentation traps.

c. Permanent erosion control and vegetative measures shall be in accordance with the erosion/sedimentation/vegetative practices recommended by the Soil Conservation Service.

d. All slopes exceeding 15% resulting from side grading shall be either covered with 4 inches of topsoil and planed with a vegetative cover sufficient to prevent erosion or be stabilized by a retaining wall.

e. Dust control shall be used during grading operations if the grading is to occur within 200 feet on an occupied residence or place of business. Dust control methods may consist of grading fine soils on calm days only or dampening the ground with water.

SECTION 16.6: STORM WATER RUNOFF

The rate of surface water runoff from a site shall not be increased after construction. If needed to meet this requirements and to maximize groundwater recharge, increased runoff from impervious surfaces shall be recharged on site by being diverted to vegetated surfaces for infiltration or through the use of detention ponds. Dry wells shall be used only where other methods are infeasible and shall require oil, grease, and sediment traps to facilitate removal of contaminants.

Neighboring properties shall not be adversely affected by flooding from excessive runoff.
Driveway placement should be such that loading and unloading activities will in no way hinder vehicles ingress or egress.

Direct access driveway placement must be such that an exiting vehicle has an unobstructed sight distance, including obstruction from signs, according to the following schedule:

<table>
<thead>
<tr>
<th>Highway Design Speed (mph)</th>
<th>Sight Distance (feet)</th>
</tr>
</thead>
<tbody>
<tr>
<td>30</td>
<td>200</td>
</tr>
<tr>
<td>35</td>
<td>225</td>
</tr>
<tr>
<td>40</td>
<td>275</td>
</tr>
<tr>
<td>45</td>
<td>325</td>
</tr>
<tr>
<td>50</td>
<td>350</td>
</tr>
</tbody>
</table>

Driveway design must be such that an entering vehicle will not encroach upon the exit lane of a two-way driveway. Also, a right-turning exiting vehicle will be able to use only the first through-traffic lane available without encroaching into the adjacent through lane.

SECTION 17.2: STANDARDS FOR RIGHT-TURN LANES AND TAPERS

Right-turn lanes and tapers will be required when:

1. expected right-turn ingress movements meet or exceed 50 per hour during a typical weekday peak traffic period.
2. driveway volumes are expected to meet or exceed 1,000 vehicles per day.
3. a Massachusetts registered engineer shall document, through traffic analysis, that such treatment is necessary to avoid congestion and/or unsafe conditions on the public thoroughfare.

SECTION 17.3: DRIVEWAY PROFILE

Driveway profiles shall be determined using the following criteria:

1. The grade of a two-way, one-way, or divided commercial driveway shall not exceed 1.5% for a minimum distance of 25 feet from the edge of the pavement. Beyond this distance, the grade shall not exceed 8%.

2. If the highway is curbed and if the sidewalk is 10 feet or less from the edge of the pavement, the grade of a driveway shall be the grade required
SECTION 17.7: ENTRANCE TO PARKING AREAS

Direct access from the highway to parking areas in a node is prohibited in the 146 HCOD.

SECTION 17.8: DRIVEWAY LOCATION

Any portion of any entrance or exit driveway shall not be closer than 80 feet to the curb line of an intersection street nor shall it be closer than 80 feet to any portion of an existing driveway located in the 146 HCOD.

SECTION 17.9: TRAFFIC IMPACT STATEMENT

Levels of service of intersections within 500 feet of the site or any nearby intersection clearly impacted by the development:

The levels of services shall be defined and calculated as described in the Highway Research Board, National Academy of Sciences - National Research Council, Highway Capacity Manual, 1964, as hereinafter updated. In general, levels of service signifies the following qualities of traffic operation:

<table>
<thead>
<tr>
<th>Level of Service</th>
<th>Quality of Traffic Operation</th>
</tr>
</thead>
<tbody>
<tr>
<td>A</td>
<td>Free flow, minimal delay</td>
</tr>
<tr>
<td>B</td>
<td>Queues develop that occasionally may not be able to clear through one green light cycle at a signalized intersection</td>
</tr>
<tr>
<td>C</td>
<td>Stable flow. Backups may develop behind turning vehicles</td>
</tr>
<tr>
<td>D</td>
<td>Approaching unstable flow. Delay may be substantial (i.e., waiting through two cycles of a traffic signal)</td>
</tr>
<tr>
<td>E</td>
<td>Unstable flow, roadway is operating at capacity with long queues during the entire peak hour</td>
</tr>
<tr>
<td>F</td>
<td>Forced flow, jammed intersection, long delays through entire peak hour</td>
</tr>
</tbody>
</table>

Traffic within the 146 HCOD shall operate at a level of C or better.
intersecting street. The driveway radius shall not compound with the intersection corner radius.

SECTION 17.12: ACCESS CONTROL ON FEEDER ARTERIALS

In order to encourage the sound development of major highway frontage, the following special provisions shall apply in any location in the 146 HCCD.

1. Access to the highway shall be controlled in the interest of public safety. Each building or group of buildings used for nonresidential purposes, and its parking or service area, shall be physically separated from the highway or street by a planting strip, buffer, berm, or other suitable barrier against unchanneled motor vehicle access or egress, except for accessways authorized therein.

2. Each separate use, grouping of attached buildings, or uses permitted as part of a single integrated plan, shall have not more than one accessway to any one highway or street. Insofar as practicable, the use of common accessways by two or more permitted highway uses shall be provided in order to reduce the number and closeness of access points along the highway, and to encourage the fronting of commercial structures upon a marginal street and not directly upon a public highway.

All development shall be physically separated from the feeder road by a curb and planting strip, berm, or other suitable barrier. Such barrier shall effectively eliminate unchanneled vehicle ingress or egress except for authorized accessways.

SECTION 17.13: CURB CUT APPROVAL

No curb cut shall be permitted within 80 feet of an intersection.
OTHER NEEDED ZONING BYLAW REGULATIONS

The creation of the Millbury Route 146 Highway Corridor Overlay District draft Bylaw, dated 12/90, is the major component of a zoning package needed to address future development on Route 146. Other items that could or should accompany this Bylaw, but are beyond the scope of this project, include the following:

Review

- Section 35, Environmental Controls, p.1191 (35.23): Review filling and dredging policy.

- Section 36, Floodplain District Requirements, p.1193: Review amount of building allowed within the floodplain.

- Section 42, earth Removal, p.1196: Establish a preparation requirement by a Massachusetts regional land surveyor or engineer.

Consider

- The establishment of a local wetland protection bylaw could be considered by the Conservation Commission, as well as a local Blackstone River Protection Bylaw.

Create

- An important Bylaw that needs to be created to accompany any new zoning changes pertaining to the Route 146 Highway Corridor Overlay District is a Phased Growth Bylaw. The purpose of such a Bylaw would ensure that growth occurs in an orderly and planned manner along the highway corridor. The Town needs to be allowed time to prepare for and maintain high quality municipal services for the expanded population along the 146 corridor. The amount and rate of growth, development, and building would be in accordance with the Town's ability to provide such services.

- A Transfer of Development Rights Bylaw could be established. This is a complex, forward thinking mechanism that would require extensive community education and sophisticated planning to establish a "sending" zoning (for example, decreased amount of building allowed on scenic farmlands) and the creation of a specific 146 highway corridor "receive" zone or zones. In these zones,
building would be allowed at a higher density level by entering into a Transfer of Development Rights arrangement between the developer and the farmland owner.

However, the receiving zone on Route 146 would need to first be downzoned to allow for this density arrangement. The political feasibility would have to be assessed. Density in some areas could be increased to levels which are higher than what is currently allowed.

Comments

- A closer analysis specifically defining the width and boundaries of the 146 HCOD would be encouraged. Input from affected residents and the businesses should be sought.

- The floor-to-area ratio (F.A.R.) figures, as requested by the Town Planner in the final draft, will allow building heights well in excess of 8 stories. Close review of the number of building stories should be addressed.

- Node Classifications requiring 16 acres and 8 acres support the purpose of the Bylaw. The third Node Classification recommended by the Town Planner of 4 acres should be reviewed. A third classification to consider would be a Node encompassing parcels smaller than 8 acres.

- A system could be developed where Nodes are classified by uses as well as size.
RECOMMENDATIONS TO THE TOWN OF MILLBURY
TO CURRENT ZONING BYLAW

The town of Millbury should look at revising the permitted uses in certain areas that border the proposed 146 HCOD, specifically the Town should look at Section 25 Appendix D. Initially, the entire Section should be clarified:

**Industrial A should be changed to Industrial 1**

**Industrial B should be changed to Industrial 2**

Section 25.12 should read:

25.12 Permitted Business Uses In Industrial 1 and Industrial 2:

- Business or Professional offices
- Printing and Publishing

In Industrial 1 only:

- Personal services
- Restaurants; except the use of drive up and/or counter service
- Commercial amusements and recreation

Section 25.15 should read:

25.15 Permitted Accessory Uses in Industrial 1 and Industrial 2:

- Home occupation, in accordance with section 41
- Residential uses incidental and necessary to an industrial establishment
- Temporary structures to be used only as temporary construction offices in relation to and in conjunction with a current construction permit and to be removed in the case of construction upon final issuance of an occupancy permit or, in the case of other types of construction projects, upon completion of all construction, in either case the temporary structure shall not remain on the property for more than 24 months.
- Other customary accessories
- Accessory scientific use in accordance with section 46

Section 25.3 should read:

25.3 In an Industrial district, no lot shall be built upon or changed in size or shape except in conformity with the following:
<table>
<thead>
<tr>
<th>District</th>
<th>Min Lotsize</th>
<th>Min. Lot Frontage</th>
<th>Min. yard front/side rear</th>
<th>Max. lot cov.</th>
<th>Max. bldg Height</th>
</tr>
</thead>
<tbody>
<tr>
<td>Ind 1</td>
<td>80,000 s.f.</td>
<td>150 ft.</td>
<td>30 ft./20 ft.</td>
<td>50%</td>
<td>48 ft.</td>
</tr>
<tr>
<td>Ind 2</td>
<td>80,000 s.f.</td>
<td>150 ft.</td>
<td>30 ft./20 ft.</td>
<td>50%</td>
<td>55 ft.</td>
</tr>
</tbody>
</table>

Industrial uses shall maintain the lot in accordance with the landscaping and lot specifications set forth in the site plan review.

*Lot coverage will include Parking areas or areas containing asphalt.
RECOMMENDATIONS TO THE TOWN OF MILLBURY
TO SITE PLAN REVIEW

Traffic

In addition to the proposed changes above, the Town of Millbury should append its current site plan review in accordance with the following:

Under the Traffic Impact Assessment, add the following:

The traffic impact statement should include plans for proposed pedestrian movement both within and onto the site.

From 146 HCOD

Certain areas from the 146 HCOD Site Plan Review are recommended to be incorporated for the Town of Millbury. Those section include:

Parking
Environmental Controls
  Water Quality
  Explosive Materials
  Liquid Waste
  Noise
  Erosion Control
  Storm Water Runoff
  Conservation
  Walk Ways
  Greenbelts

Driveways
  Standards for Right-turn Lanes and Tapers
  Driveway Profile
  Access Points
  Number of Driveways per Parcel
  Interior Circulation Drives
  Entrance to Parking Areas
  Driveway Location

Signage
The process of planning is said to be limited in implementation, this is largely true, but one of the exceptions is the process of zoning. Zoning is the process by which the ideas and wishes of the people are translated into by-laws which directly affect how and what types of landuse are authorized in a town. The Route 146 Corridor Zoning Study is an attempt to interpret the town's needs along with the town's desires into a new set of by-laws useful in the future.

This study was an attempt to look at the factors which make zoning important as well as the factors which make zoning itself. The study team initially looked at this procedure as a two-tinged fork. One tine was the practice of zoning throughout the country. By looking at what makes up the "state of the art" throughout the country the team hoped to create by-laws that would reflect the true ability of zoning. This was a very effective approach, because the team was able to handle the issues in the Route 146 corridor with the latest of techniques available, and the team could rely on the research of others for ideas that we might not have happened upon otherwise.

The second tine in the fork was to look at the Town of Millbury. This tine was an attempt to look at the needs of the town, in this corridor, in terms of the physical landscape, the economy of the town and region, and the socio-cultural issues in the town. Much
of the physical and economic issues were solved rather simply by looking at the recent history of the corridor area. The land in the corridor vicinity has undergone several changes recently, the introduction of an intersection with the Massachusetts Turnpike, and the assembly of rather large parcels. This indicated to us that there is some rather heavy speculation at work. This more than anything has forced the shape of the by-law recommendations.

Examining the town of Millbury and the corridor closer reveals more evidence of a town preparing for a boom. Millbury borders Worcester to the south and in the recent years has been luring business away from Worcester with aggressive techniques. This combined with the fact that this is truly Millbury's industrial corridor (37% of the land in this corridor is IND/BUS zoned as opposed to 15% for Millbury overall). Millbury has been using the image of the small town that has fewer landuse policies to do this luring, it has been effective according to what we found. The belief of the Millbury Planning staff is that the creation of the commercial areas will supplement it's tax base. Since Millbury has already limited the amount of residential they feel this will provide the finishing touches on stabilizing their tax base. This technique is common in some towns, and while it will prove most effective for Millbury in the short term, some of the long term affects of this policy may be troublesome later. The unbalanced growth of commercial without residential may become an artificial factor in the housing market. This type of a factor in the market will cause some difficulties for Millbury's neighbors.

OUR PRODUCT

In the scope of services we were asked to come up with some zoning concepts that reflected both the upcoming land boom, and the need
of the physical and economic issues were solved rather simply by looking at the recent history of the corridor area. The land in the corridor vicinity has undergone several changes recently, the introduction of an intersection with the Massachusetts Turnpike, and the assembly of rather large parcels. This indicated to us that there is some rather heavy speculation at work. This more than anything has forced the shape of the by-law recommendations.

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OUR PRODUCT

In the scope of services we were asked to come up with some zoning concepts that reflected both the upcoming land boom, and the need
for the town to deal with that boom. The study team produced a by-law proposing a Highway Corridor District. This type of by-law has been used in several places in the country and is very effective in dealing with the issues of development in a developing highway area. Our HCD by-law was designed to reflect the need for open space while allowing the developer to develop with uses that may be previously denied. In order to avoid development in a strip format the HCD by-law employed a NODE concept. This concept allowed greater use based on larger sized parcel. The theory behind this was that in order to qualify for a certain type of land-use the developer has to have a certain amount of land and must conform to certain standards of design and access. This by-law reflected many virtues of zoning, allowing the best highest use of the land while maintaining some amount of control and encouraging the use of good creative design practices. The framework of a new zoning district was considered too difficult to deal with from the town's perspective, but the concepts contained in the HCD were considered good. The planning staff asked for modification of the product to an overlay district.

The overlay district was developed to respond to the developers need to have some underlying uses on their land, thereby some stability on their land values. This forced the team to re-think the framework of the bylaw proposal. The result has been the proposal of three different by-laws. One is the Route 146 overlay district. The second is a modification of the town's new site plan review process and the third is the proposal of a new Parking by-law that accounts for the large scale development expected. The node concept is incorporated into the OD by-law, and like the HCD by-law allows for an increased number of uses with increased
The product is largely a reflection of the wishes of the town planner, as consultants hired to work in the town we are forced to represent the views of the staff that hires us. This has good and bad implications. Good because the planner has more experience in this town and knows his "turf". Bad because as consultants we are implicitly brought in to reflect an independent opinion for the town free of the internal politics. We have operated largely under the auspices of trying to please our immediate boss the planner.

The product we have produced is a very conservative attempt at controlling the growth of the expected land boom. As the planner directed us we have built in a number of "negotiable" that allow the planning board to "deal" with developers and coerce voluntary concessions not explicitly provided for in the towns by-laws. This is an attempt to gain concessions that used to be provided for by the Federal and State governments. The town now lacks that aid and is trying to gain it from the developer. In the case of Millbury 199? the value of getting land in this high value area will force developers to concede to the wishes of the town and provide for the town that which was provided by the state. Our product reflects a trend in the tightening of land use controls at the local level to create a revenue source.

WINNERS AND LOSERS

Financial
In an age that lacks federal funding and subsidies are few and far between the town of Millbury is responding in a fashion not unlike other towns. Millbury has the advantage of being the linking
highway between Providence and Worcester. This combined with the new Turnpike interchange makes Millbury a big winner in the financial sense as the development being encouraged will supplement the towns tax base.

Development, when it comes will be forced to pay the price (and likely will). This will act as an inflation tool on other property in the town, an could likely be the cause of re-location of smaller businesses out of the Route 146 area. The real loser will be the service business in the corridor that is barely making it now. In the coming boom these types will be forced out by increased cost beyond their ability to keep up.

The communities neighboring Millbury will be forced to strike a balancing act as well. They will be winners because they will gain from the Millbury level of development. They too will feel (though not to the same extent as Millbury) the addition of tax dollars brought on by property value increases. They will also feel the bite on that tax money.

The towns that surround Millbury will become the victims of increased demand on their roads and the other services provided to people that work in Millbury, but live in the surrounding communities. This will force those towns to become subservient to Millbury's industry thereby causing them financial hardship. The By-law as it is written will allow the town to create far more employment than it can house, this will create the situation just described.

Economic
The boom that Millbury will center is likely to have far reaching economic impacts. The town is likely to see an upsurge in employment along with an increase in employable residents. Economically the landuse controls proposed by this studio group will help Millbury. These controls propose the implementation of denser buildings, while contributing more to the community.

In terms of economy, these regulations will help increase in size. The real question is "Is bigger better" Millbury faces that issue, while they must grow they must be aware that the more jobs they create the more people there will be looking for those jobs. Bigger may not be better, but Millbury is looking to encourage growth that will represent a stable industrial and commercial income while impacting the town the least. Clearly Millbury is a potential winner economically.

The economic losers in this situation will be those who are living in Millbury and derive their living from the small town economy that the town now enjoys. Though the by-law is designed to minimize business conflict, there is likely to be some decline in the downtown business sector, this is the loss that the town will have to face. This will also have an impact regionally if Millbury gains the industry expected. Other neighboring small towns will face the loss of business due to new development in the 146 corridor. They will have to deal with this. It is interesting to note that these impacted towns have almost no say in the decision making process in Millbury.

Environmental

The bylaw draft that was proposed by this group tried to minimize
the impact to the environment. It is however, naive to think that there will be little effect on the environment. Further it is naive to predict what those effects will be. The bylaw as it is written attempts to protect the natural environment by specifying the how an what of development and its relationship to the environment. While the environment will inevitably be altered by the development that is coming, the hope is that the impacts can be minimized by the application of the by-law.

Overall
The larger philosophical question that needs to be addressed is this: "Should Millbury encourage growth in the 146 region, given that it will create winners and losers (previously described)?" Ultimately Millbury is given little hope of stopping growth in the Rte. 146 region. The approach taken by Millbury is to encourage that growth, and to use the growth to its (Millbury's) best advantage.

This pro-growth stance is done to supplement the towns tax base. The effects are real for Millbury and her neighbors, but this section of town is clearly Millbury's commercial/industrial corridor and as such the town probably needs to encourage the growth.