VISIONING WESTON NURSERIES

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Overview

For the future development of the Weston Nurseries site, our team proposes a development concept that would serve the needs of a diverse community of seniors, empty nesters and families. We believe that these groups would be most drawn to a site such as this, and place a high value on its main features and amenities, which are the open spaces and natural environment as well as the general rural character of Hopkinton.

At the heart of our site is the active agricultural use in the viewshed along Route 135 and a mixed-use village community. The viewshed area that is widely cherished by Hopkinton residents would serve as agricultural land for a farm coop, community horse stable and other active agricultural uses. The Garden Center would continue to operate in its current location, and could be expanded to include complimentary retail uses such as an organic food store and café. On the western portion off of Wilson Road, we propose to have a conference center below the natural gas facility.

Our proposal primarily focuses on three residential communities that may be developed by different developers and/or as separate phases. Moving up the hill to the north is *Azalea Hill*, a residential village center on the hill off of Phipps Road, which will feature higher density housing for young families and 55+ seniors. Continuing north to *Weston Woodlands*, residential development becomes progressively less dense, ranging from quarter acre to 3+ acre lots, which are envisioned to serve those who have interests in equestrian activities and low-scale farming. To the south and below Route 135, the *Marathon Flats* residential development takes the form of clustered housing with generous open space surrounding the neighborhoods. The Southern portion of the parcel also includes a community node in the center, which includes space for a new elementary school, playing fields, and a community center.

Site Analysis

Constraints

- The main limiting factors for development are the site's water-related features such as wetlands and a future water well, which require buffers for protection.
- There are a few areas where the slope is greater than 20%, but overall, the terrain is gently rolling and relatively flat in many places.
- Some existing development such as the residential neighborhood along Curtis Road and the natural gas utility site will require buffering and are also constraints.
- In general, the quality of the soil is poor, although buildable, and will limit the use of septic systems although it is not impossible. A large new development will most likely require a sewer treatment facility to service the residents.

Opportunities

- Mature forests currently run along the perimeter of the site, and there is little tree cover in the interior. There is potential to create connections between Hopkinton and Ashland state forests on the western edge and to recover some of the vegetation lost due to previous agricultural activity by creating open spaces.

- There are no significant wildlife habitats and few recognized vernal pools on-site. However, there are opportunities to create some green/wildlife/recreational corridors to connect to the larger regional network.

- The scenic roads, viewsheds and gently rolling topography are also opportunities that should be incorporated.

- The site's existing use as the Weston Nurseries Garden Center is an opportunity in itself to expand on, and potentially encourage similar retail activity to generate revenue for the Town and provide amenities for residents.

Design Objectives

In addition to the individual goals and objectives for each of the residential developments shown below, our team also had overarching principles that shaped our overall concept and design:

- Incorporate the main objectives of the town of Hopkinton as stated in the RFI: "Preserve rural character", "Improve QOL", and "Be revenue positive".

- Leave at least 50% of site as open space (Pulte proposed 50%).

- Highlight and take advantage of the site's unique amenities and history.

- Limit traffic impact.

- Protect natural resources, especially water resources and vegetation. Plan for new vegetation growth to replace what was lost.

- Incorporate innovative stormwater management techniques.

- The design concept should be appealing to a private developer (who will probably be most interested in density, zoning and town support, and infrastructure costs).

Design Features

- We propose three types of neighborhoods at varying levels of density:

    - ***Azalea Hill*** - Village Mixed-Use Residential (8-10 DU/acre, single and multi-family homes)

- ***Marathon Flats A & B*** - Traditional Subdivision (3 DU/acre, primarily single-family homes with some multi-family)

- ***Weston Woodlands*** - Rural Residential (1 DU/acre, single-family homes)

- The neighborhoods will be woven into the network of open spaces and natural systems to a) preserve the rural character, b) make the most of viewsheds, c) provide recreational opportunities and d) facilitate stormwater management. Connections will be created between established open spaces such as the Hopkinton State Park, the existing trail network, a future rail trail, and the wetlands systems and other water bodies.

- Roadways have been designed to manage stormwater without the typical curbing and piping infrastructure. In the Marathon Flats Development, the roadway right of ways include swales that will treat runoff from the roads. In the Weston Woodlands, the roads are narrow and winding, limiting the amount of impervious surfaces.

- Commercial uses on the site include the Weston Nurseries garden center, which could be the springboard for development of other boutique shops related to gardening and uses that go along with it. The conference/retreat center with active open space is a revenue generator that can also serve to screen the natural gas facility from the rest of the site, and provide a use that requires minimal traffic access on Wilson Street.

- Traffic in general is a concern that the Town has expressed, especially along Route 135. Our proposed development would have an efficient roadway system that connects to existing arterials and connectors, and have minimal curb cuts on busy streets. Within the development, the streets can be relatively narrow, and should follow contour lines along hills to minimize the visual impact of traffic in the natural environment.

- We also propose two major public facilities: an elementary school/community center in the southern portion of the site with playing fields and a pond for recreational activities; and a public park on the hill at the village, which features views to Boston.

VISIONING WESTON NURSERIES: AZALEA HILL COMMUNITY

Taylor Mammen

Occupying the current site of Weston Nurseries' commercial sales operations, the Azalea Hill Community (of roughly 30 acres) will feature flexible housing designed for young adults and seniors. The community offers a diverse range of housing options for multiple income levels by recreating the somewhat eclectic development forms of small New England downtowns. Setbacks and architectural styles strive to eschew strict uniformity in order to provide a sense of development over time and without the structured demands of financial pro formas.

Streets form an irregular grid that follows the site's unique contours, thereby creating public view corridors and allowing for drainage along the roadway. Single- and two-family homes front the street (sometimes at irregular angles) at setbacks of between 5 and 25 feet and share a common park space inside the block. The homes are sited to maximize privacy and views. Sidewalks line one side of the streets, though principle pedestrian travel will likely take place on the development's trail system, which connects to the much larger regional trail network and important community amenities such as a manicured village green, community recreation center, and community kitchen and herb garden. Residents and their guests can also walk to nearby active agricultural fields and forested wetlands that make the Weston Nurseries parcel so unique.

Specifically, the building inventory includes a total of roughly 138 units, in the following types:

- 63 3,500 sq. ft. New England Village Homes (single and two-family). 94 total units.

  At an average of 1.5 units per structure, the Village Homes might be either rented or sold as condos (with a potential price of between $325-375K). First floor dwellings might ideally house senior residents, while young couples and families could occupy the second and, in some cases, third floors.

- 22 3, 750 sq. ft. Mansion Townhomes (two family w/ accessory dwellings). 44 total units.

  The Mansion Townhomes, located within larger setbacks and closer to public amenities and open space in order to contribute to continuity within the community, will each include two condos with the possibility of some accessory dwellings. This larger housing option would likely serve empty-nesters that are not ready to downsize completely, but still desire the security and convenience of being located in a planned community.

- 7,500 sq. ft. community center w/ ballroom space, exercise rooms, swimming pool, rental kitchen and dining space

  The community recreation center, along with the adjacent community kitchen garden, forms the development's focus. The one-story, windowed building will look through a grassy opening toward the village green. Kitchens, a library and reading room, a ballroom, exercise facilities, a swimming pool will be provided to residents and their guests by homeowner fees. The community center will also include space for rent by residents who require larger facilities to accommodate guests.

- 15,750 sq. ft. (in three buildings) of assisted living facilities

  The apex of the Azalea Hill experience is at its base, in the forested area to the east. Assisted living facilities, set within the trees and with views of the open space to the north, will serve the community's most elderly residents.

VISIONING WESTON NURSERIES: WESTON WOODLANDS

Helen C. Lee

Some of the main concerns of the Town are to preserve the scenic views and woodlands in the northern parcel as well as the rural character of the community. With these objectives in mind, we have created the Weston Woodlands development, a higher-end low-density residential community (that still accommodates a range of lifestyles and income levels). The idea is that this will not be a gated community, but one that has open spaces and trail networks that are accessible to all residents of Hopkinton and the greater region. Wherever possible, passive open spaces are connected to create ecological and wildlife corridors.

In particular, the site plan for Weston Woodlands aims to achieve the following goals and objectives:

1. Preserve important viewsheds, scenic roads, woodlands, wetlands and other water bodies.

a. Take advantage of the market appeal of these amenities and opportunities e.g. houses should be staggered and directed to maximize views.
b. Existing scenic roads (e.g. Phipps) may be extended and other roads may be reused. The roads created by Weston Nurseries generally follow contour lines and have old, beautiful trees lining them.
c. Existing woodlands and pockets of trees in the interior should be preserved wherever possible since much vegetation has already been cleared for farming activity.
d. Open spaces should be connected to create ecological corridors. Corridors facilitate wildlife migrating patterns and help to preserve sensitive species.

2. Preserve the rural character of the area.

a. Create narrow, winding streets using porous materials. No sidewalks.
b. Building typologies should blend into the natural landscape.
c. Development should not impact viewsheds and major scenic roads. This can be achieved by clustering houses and hiding buildings behind vegetation. Homes should not front important scenic roads.

3. Provide a range of housing choices to accommodate different lifestyles -- 4 categories.

a. Traditional Hopkinton single-family (0.25-0.5 acre lots)
b. Rural vista single-family (0.5 acres lots)
c. Large lot single-family (1-2 acre lots)
d. Large estates to accommodate equestrian facilities (3+ acre lots)

4. Create usable public open spaces and recreational facilities.

a. Active community space in the center of the development within 0.25 mile range of all homes. Includes tennis courts and a pool as well as administrative and meeting/event spaces for the homeowners association.
b. Trail network connects homes to passive and active open spaces, creating a walkable neighborhood. This network also connects to open spaces outside of Weston Woodlands via the regional open space network.
c. However, to be cost-effective, open spaces that require frequent maintenance should be minimized, letting large tracts of the land grow naturally and develop into mature woodlands.

5. Minimize stormwater runoff and convey to vegetated areas.

a. Locate roads and lots so that they are parallel to the contour of the land.
b. Reduce impervious surfaces through narrow streets made with porous materials.
c. Convey direct runoff to vegetated areas. Especially, at the bottom of a slope, cul-de-sacs and T-shaped roads should run easements to allow stormwater to flow into designated areas for recharging.
d. Use creative lanscaping e.g. rain gardens to collect stormwater runoff especially at the bottom of a slope.
e. Might want to consider rain barrels for homes and community center.

Note: Guidelines for Rain Gardens [Source: http://www.mninter.net/~stack/rain/]

- ***Design*** -- Create a dip at the center to collect rain and snow melt. Any degree of indentation is useful, from slight dips made with your garden trowel to large swales created by professional landscapers. Neatly trimmed shrubs, a crisp edge of lawn, stone retaining walls and other devices can be used to keep garden edges neat and visually appealing.

- ***Location*** -- Strategic placement next to hard surfaces such as alleys, sidewalks, driveways and under gutters makes your rain garden effective. Can also act as a living barrier.

- ***Plant Choices*** -- Hardy native species that thrive in our ecosystem without chemical fertilizers and pesticides are the best choices. Many rain gardens feature shrubs as well as wild flowers and grasses. As a rule, the less "turf" on lawns, the better it is from a water quality stand point -- turf-style lawns create a harder surface which does not absorb water as readily as garden areas. Also, turf-style lawns often require chemical treatments and extra water to look uniform. Yards that feature native plants, grasses and shrubs are much easier to maintain.

VISIONING WESTON NURSERIES: MARATHON FLATS A

ADAM MARCUS

The site plan for Marathon Flats A was created to meet the following goals and objectives:

1. Build less Infrastructure

a. Build narrower roads to create slower more scenic roads while lowering development costs.
b. Minimize coverage of soil with impervious pavement and concrete to allow for natural stormwater drainage and retention and to lower development costs.
c. Locate buildings in concert with existing topography to minimize cut-and-fill grading. This will help maintain mature woodlands, wildlife habitat, and will prevent issues with erosion.
d. Build sidewalks on only one side of the street. Given the rural character of Marathon Flats, it is not necessary to build so much infrastructure especially since residents may prefer to walk on paths or grassy swales.

2. Preserve scenic viewsheds, existing wetlands, woodlands and other natural features.

a. Take advantage of the market value for views and proximity to natural amenities by orienting houses away from each other towards woodland or open space.
b. Incorporate existing scenic roads where possible and build new roads that follow the natural topography of the site.
c. Preserve existing woodlands and pockets of trees wherever possible
d. Connect open spaces and wildlife habitat. Marathon Flats preserves a ribbon of green space that connects to the wooded corridor just north of Hwy 135.
e. Development should not impact views extending from Hwy 135 to the pond area located south of Curtis Road.

3. Preserve the rural character of the area.

a. Building typologies are varied but should generally reflect the local and regional vernacular while blending in with the natural landscape.
b. Homes should be clustered and oriented away from the road to maintain a sense of the “country road.”
c. Automobile access and parking should be oriented to the side or rear of the house to create the perception of country roads rather than conventional suburban streets.

4. Provide a range of housing choices to accommodate different lifestyles

a. Single-family (0.25-0.75 acre lots)
b. Duplex/Townhouse (0.25-0.5 acre lots)
c. Triplex (0.25-0.75 acre lots)

5. Create usable public open spaces and recreational facilities.

a. Active community space along the parkway provides open space for kids to play and an apple orchard for the residents to tend and enjoy. This space shall be maintained through the homeowners association. This space may also be used for race warm-ups and other Boston Marathon activities.
b. The trail network provides ample connections between streets for pedestrians, hikers, runners, and equestrians. The network also takes advantage of the abandoned Rail Trail Right of Way.
c. Open spaces that require frequent maintenance should be minimized.

VISIONING WESTON NURSERIES: MARATHON FLATS B

VALERIE GINGRICH

The site plan for Marathon Flats B was created to meet the following goals and objectives:

1. Preserve rural character and treat stormwater with roadway design

a. Rural parkway road design as the primary access through the site -- a one way 20 foot roadway with a large vegetated green swale area in the median. The swale serves as treatment for stormwater and as a visual element that adds to the rural feel of the neighborhood. The area is natural open space with trees and wild grasses. The swale has a slight slope down from the roadways on each side to capture water.
b. Secondary streets also take advantage of "country drainage" -- no curbing on the sides of the roads. Instead, swales are located along the roadways to infiltrate runoff from the road
c. Sidewalks on one side of the road -- all roadways have sidewalks on only one side of the road to encourage pedestrian activity but decrease suburban feel of sidewalks on both sides of the road

2. Provide a community node -- education and recreation facilities

a. New elementary school site -- New residential development could require an additional school facility in the town. This school site could be the center and node of the residential communities around it. A new elementary school is an opportunity to take advantage of "green" building technology -- the school could serve as an education piece for the entire community.
b. Community center integrated into school building -- The community center could be used for meetings, performances, etc.
c. Playing fields -- soccer, baseball, playground
d. Pond preserved for view and recreational activities
e. Community parking for sporting events -- Instead of paving a parking lot for use of the playing fields, a structured grass parking lot can serve the same function without creating additional stormwater runoff. This type of parking lot can bear normal vehicular weights and is designed for uses that are not intensive daily uses.

3. Provide a mix of energy efficient housing that creates a neighborhood feel

a. ¼ acre lots clustered together with a greenbelt surrounding the neighborhood
b. Mostly single-family homes with some two-family homes mixed in
c. Shared driveways to decrease roadway interruptions and cut down on impervious surfaces
d. Common natural open space areas in the interiors of the lots

4. Preserve natural open spaces and systems

a. Wetlands buffered and preserved. There is no construction in the wetland buffer zones
b. A trail network connects the neighborhood, school, fields and surrounding areas
c. The Upper Charles Trail is realigned to the south of where it was originally proposed. Instead of disrupting an existing residential neighborhood, the trail is incorporated into the new site.
d. Low maintenance trails—dirt or wood chips where possible. Wetland crossings will require primitive wooden bridges. Maintenance of the trails could be coordinated with an organization such as the Boy Scouts on an annual basis

5. Treat stormwater where it lands

a. Drainage swales—capture and treat water from roadways. No pipes are required. Eliminating such infrastructure not only cuts down on costs, but creates a natural system that treats stormwater where it lands instead of directing it elsewhere.
b. Driveways constructed with pavers—water infiltrated through pavers and grass
c. Dry wells for roof runoff