Site and Urban Systems Planning

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Weston Nurseries Site Plan

Site Inventory and Analysis

This section falls into three main categories: Constraints, Constraints with potential as opportunities and Opportunities. The constraints category includes features like the LNG facility, the radio/cell tower, steep slopes and soils. The LNG facility and radio/cell tower become a disamenity in the valuation of properties and parcels adjacent to these features, especially safety issues related to the LNG facility. Steep slopes and poor soil conditions limit development in certain areas. There is only one zone with a bank of steep slopes straddling parcel A and Weston Nurseries. The remaining steep slope locations are scattered around the site. There are two major areas of unbuildable soils, one of which is associated with the wetlands and streams in Parcel C.

The constraints with potential as opportunities category includes hydrographic features like wetlands, ponds and streams, Hopkinton State Park, future Weston Nurseries operations and areas perceived as amenities (visual and recreational) by town residents. The ecologically sensitive area in Parcel C, which includes wetlands, ponds and streams as well as Hopkinton State Park (abutting Parcel A) are limitations in terms of development possibilities but have potential as natural and recreational amenities. The parcel at the core of the site is proposed as future operations for Weston Nurseries. This coincides with the areas perceived as visual (viewshed) and recreational (open space) amenities by town residents.

The opportunities category includes the diverse topography of the site (hills/slopes and low areas) and the panoramic views/vistas from the highest point on the site. The diverse topography of the site could be exploited using appropriate building typologies and densities. The highest point on the site is located at the intersection of Parcel A, the radio/cell tower site and the 'not for sale' parcel. The elevation at this point is 153 meters above sea level and the offers views to Hopkinton reservoir and Boston.

The site's context also provides opportunities. It is directly adjacent to Hopkinton State Park and less than a mile from Ashland State Park. There are currently trails on the Weston Nursery site that tie into those at Hopkinton State Park and the adjoining Hopkinton reservoir property. Additional site opportunities include its proximity to two commuter rail stations (Southborough

and Ashland) and its easy access to both I-495 and I-90. There are five public and charter schools within Hopkinton's town limits. There may not, however, be sufficient space in these schools to accommodate increases in the student population.

Concept Plan Overview

The design of Weston Villages preserves the site's natural systems and cultural heritage, while accommodating local demand for housing. The usage of space within the development, the connective tissue between spaces, and the proposal's overall form and shape ensure the unique balance of preservation and accommodation.

Nature's Land Use

The use and space of the villages themselves preserve the site's natural bounty: its agricultural uses, scenic viewscapes and accessible open space. Weston Nurseries will remain in operation on a contiguous plot north of 135. This preserved plot contains the views that community residents strongly identify with Weston Nurseries. We would be remiss to develop it. Existing agricultural land South of 135 can remain in the nursery's hands or can be utilized for community gardens. Access and trails for equestrian riders will actually be improved, with an on-site equestrian center (at an appropriate distance from the neighborhoods).

The open spaces are preserved for their inherent value and views, but also for the recreational and educational amenities they provide to Greater Hopkinton. Open space will not simply be left open and unutilized – a prescription for unwanted future development. Rather, the open spaces will preserve natural systems while maximizing use and amenity for the residents. Exisiting ponds and wetlands will be accessible by local trails, available to children as an outdoor classroom, and viewable from public and private viewpoints. Flat, graded areas will be used for local parks, greens and commons. And undevelopable land will be sensitively crossed by trails, utilized for horses and hiking, and preserved for views.

Ecological / Urban-Rural Infrastructure

Weston Villages' mix of urban village development with open space preservation balances the best of both suburban and rural amenities with minimized intrusion on existing conditions. The urban village concept makes the project cost effective, affordable housing available, and waste water treatment feasible. In the same village with such modern amenities, one will find narrow, curbless streets, natural swales and recreational trails that perpetuate the area's wetlands and water systems. Families and horse riders will continue to wander the area's trails and retained open spaces. The scaled-down streets will save construction cost, minimize disruption of

stormwater flows and allow more space to remain open. At the same time, the network of streets, pedestrian paths and recreational trails will ensure that all residents have access to local and state parks, view points, and recreation fields, while maintaining adequate privacy and views in their own homes.

Weston Villages provides the advantage of urban amenities like affordable housing and wastewater treatment, while maintaining a rural village ambiance and recreational access to Hopkinton's natural resources, wetlands, open spaces and trails. The clusters of homes preserve open space as well as make waste water treatment cost effective, let alone feasible. Narrower streets with fewer curbs and parallel swales reduce the impermeable surfaces on the site and allow rain to quickly infiltrate.

A winding parkway connects the various village like clusters into a single community and connects this development to Hopkinton town center. This bucolic road connects Clinton Street to Rafferty street. Another secondary road connects the center of the north site to Route 185, north of Hopkinton.

Morphology

The form, shape or morphology of the villages was precisely designed to conserve sensitive wetlands, viable agriculture and desirable viewsheds. In the south, homes and public spaces are sensibly sited to preserve and buffer wetlands, vernal pools and sensitive habitat while maximizing the value gained from views of and access to these areas. North of 135, the most integral part of the Weston Nurseries, which also happens to be the most desired viewshed of the site, are preserved. The grid layout in the Norht is consistent with local topography and drainage flows, so that downstream vernal pools are maintained and the rolling, hillside views are integrated rather than interrupted. The urban design allows the community to maintain semi-private neighborhood clusters which are accessible, but not necessarily visible, from other neighborhoods..

At the same time, the village grids maximize access for the residents while minimizing local and regional traffic congestion. The interconnectivity of the local grids mean that riding, walking, driving within or to the villages is easy. Traffic is not concentrated on any one street. The connecting parkway actually increases access to and from 135, 85 and 90 for residents, without increasing through traffic on the site. The interrupted grid of short streets trailing off into open space are meant to mimic the existing pattern of quaint, safe neighborhood streets.

The Essence of Weston Villages

South Site

Consistent with the goals of the entire concept plan, our proposal for the ___ acres south of route 135 is based on an ecologically sensitive infrastructure system, a street and housing morphology that responds to the land's natural features, and a careful design that optimizes opportunities to enjoy the landscape's beauty.

The primary objective on these ____ acres is to protect its extensive wetland system while also creating a pedestrian oriented neighborhood on Weston Nursery's most buildable land. In order to achieve these goals we propose a dense network of streets and houses surrounding a central node. This node is defined by a new elementary school, a church/synagogue, 15 senior living units, and three small structures that may accommodate small businesses or civic functions. The dense residential neighborhoods, though distinct from the existing Hopkinton community, protect the property's environmental integrity while recognizing the realities of the current real estate market. In other words, in order to protect a minimum of 50% of the site, the housing must be compact. In this plan we accomplish this imperative while maintaining the privacy and family oriented character evident throughout Hopkinton today.

Public access to open space is another key feature of our design. Many of the streets are very narrow drives with homes located on only one side of the road. This allows the owners of these homes to enjoy a large expanse of open space rather than a narrow view if the units were to back onto the open space. These properties may have smaller lots than they would under the other scenario, but we believe the premium these houses will have due to significant open space access will compensate for the small lot sizes. We may also find that the properties not immediately adjacent to the open space will sell at a premium because they are within walking distance of a beautiful, easily accessible open space network. The existing Hopkinton community will also benefit from the ease with which everyone can enjoy the site's natural assets.

It is important to note that there is no BMP or other sediment basin on the property. Storm water infrastructure is significantly reduced on this site due to the extensive network of swales. These Low Impact Design (LID) features ensure that storm water is absorbed on contact with the land rather than being directed to a pipe and filter system (common in most communities today). This feature will save Hopkinton money and energy of typical storm water infrastructure maintenance.

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The north site is approximately 45 acres and

This concept plan is centered on a **primary corridor starting** at the intersection of Route 135 and Clinton Street and connecting to the intersection of Wilson and Rafferty Road. A secondary corridor connects Route 85 (north of Hopkinton Town Center) and Howe Street, a scenic route along Hopkinton Reservoir. Another secondary corridor extends Frankland Street, south of Route 135, and reconnects to Clinton Street in Parcel C. All these corridors are visualized as winding parkways connecting the proposed land uses and wooded areas. They also skirt areas designated as Title 5 land. With eco-sensitive design and accommodation for various modes of transportation including walking and bicycling, these corridors establish the tone for development in the area.

Development parcels are concentrated in two main areas: Parcel A (including A1) and Parcel C. The topography in Parcel A allows for a sloped site building typology with mixed densities. The areas adjacent to the parkways are developed to a higher density (8 to 12 units per acre based on multi-family or single family housing). Densities are gradually reduced based on distance from the Parkway and average about 4 units per acre. The eco-sensitive zone in Parcel C limits the extents of development in this area. This zone is conceived as a higher density core with lower densities adjacent to Title 5 areas. Neighborhood based convenience/community facilities are located at walkable hubs in both Parcel A and Parcel B.

Parcel B is dedicated to an equestrian facility, including stables/boarding stalls, training rings, outdoor and indoor show arenas, grass fields, riding trails and a riding academy. The choice of this facility as a revenue generation program is based on the suitability of the terrain to horses, connections to open space and state parks and possible utility for town residents in Hopkinton and Ashland. An area of commercial activity is located adjacent to the Weston Nurseries Garden Center and the area around this hub is projected as future high density development, as and when the land becomes available.