Conservation Subdivision working group notes -- 7/3/07 meeting

Called to order at 3:40, adjourned at 5:05. Notes compiled by Victoria Barlow.

Next meeting: July 17, 3:30 – 5:00, Town Hall

Attendance: Scott Self, chair; Deb Crowder, Victoria Barlow; Town Planner Sara Carbonneau
Outstanding questions are underlined.

The group devoted the meeting to testing and refining theories, by applying numbers and principles to the 233-acre Carpenter Home parcel. Using tax parcel maps and the 2003 forestry management plan prepared by Bay State Forestry Service, members approached the parcel as developers attempting to design a conservation subdivision.

The parcel's restricting features include

- *the large amount of acreage with steep slopes*
- *the length of road that would be necessary to reach the relatively flat portion in the northwest corner of the lot*
- *narrow parcel configuration of the section immediately off Route 32 (limiting space available for buffers).*

Conservation land
Working definition of conservation land: The part of a conservation subdivision that is left in its existing natural state at the time of subdivision. If part of a farm, existing agricultural uses may be continued.

Recreation facilities (eg, golf course, ball fields), while encouraged, are not to be included in conservation land calculations.

The final definition needs to provide for view maintenance, forest management, trail maintenance. The intent is to keep the land functioning as it was at the time of subdivison.

How best to achieve permanent protection of conservation land?
Concern: future development of the conservation land, including subdivision, construction of housing, construction of income-generating facilities like cell towers or a wind farm.

Agreed: the best option is a conservation easement, held by a land trust.

Second best option = management by the homeowners' association, which runs with the land forever, similar in function to a corporation.

Association documents, which are approved by the Planning Board as a condition of the permit, must identify important features the conservation land protects, and spell out permitted activities (eg, logging, with forestry management plan) and what kind of man-made improvements are allowed (eg, trail maintenance, benches).

As a condition of the permit, any changes in association documents must be reviewed and approved by the Planning Board.

Road length

What should be the maximum road length in a CS?

Asked but not resolved at this meeting.

See Carbonneau's follow-up calculations at the end of these notes.

Buffers

Agreed: The 200' buffer proposed at the last meeting would be too wide in the Residence district. Perhaps the contents of the buffer should determine its width – if the land is densely wooded, 100' width may be sufficient. If natural vegetation is insufficient for screening, it may be appropriate to require a fence.

Agreed: The buffer should be retained and monitored by the homeowners' association (rather than being included in the house lots). No development or building shall be permitted in the buffer.

Agreed: Buffers should not be required around the conservation land portion of the parcel. They are only necessary around lots that will be developed.

Should buffers be considered conservation land?

Crowder, Barlow say no, because buffers do not serve the conservation function.

Should buffers count as develop-able land when calculating density?

(Steeply sloped land and wetlands are excluded in density calculations.)

Agreed: Include buffer land towards density calculation.

Also agreed: We may prefer to use formulas to calculate density.

- Working numbers (Rural/Ag district) are 60% conserved land, 40% developed land.
- A second working approach is to stipulate that a maximum of 50% of lots must be ½ acre, a maximum of 25% of lots can be 1 acre, and a maximum of 25% of lots can be 2 acres (again, Rural/Ag district). This formula results in a density bonus over a conventional yield plan.

Density

We need to define the level of confidence we require from engineers, because soils maps can be off by 3 acres. As part of the CS review, the PB

should require evidence that surveyor and wetlands scientist have walked parcel, referenced aerial photographs, topo maps, and have dug test pits.

Should CS density be based on underlying density, or should bonuses be allowed?

Should higher density be allowed when a greater percentage of land is conserved?

Agreed: the CS regulations probably will have to be different in the Residence and Rural/Ag districts.

Working requirements for Rural/Ag district (*calculations using these numbers provided by Carbonneau after the meeting):

- Conservation land must be at least 60% of developable portion of parcel.
- Minimum ½-acre lot size, maximum 2 acre.
- ½-acre lots not to exceed 50% of total lots.
- 1-acre lots not to exceed 25% of total lots.
- 2-acre lots not to exceed 25% of total lots.
- Do we require a mix of lot sizes? Perhaps this will just happen, of necessity, driven by the features of the parcel.

Carbonneau's follow-up calculations:

* In a parcel containing 100 acres of buildable land, Rural/Ag district:
Conventional subdivision yields 33 lots at 3 acres

- Assume 225' of frontage
- Assume 17 lots on one side of the road, 16 lots on the other
- Results in a 3,825' road

Conservation subdivision (60% of land conserved, 40% developed) yields 55 lots – significantly more than the conventional scenario.

- Assume 50% of houses on ½ acre lots with min/max 100' of frontage
- Assume 25% of houses on 1 acre lots and 25% on 2 acre lots; both with min/max 200' frontage
- Results in a 3,600' road

Conclusion: In both scenarios the road length is virtually the same, pointing towards the importance of establishing a maximum street length and encouraging loop roads.

Addendum/Correction added by Sara Carbonneau on 7/12/07 to the section "Carbonneau's follow-up calculations"

Assume 50% of the 40 acres (20 acres) can have 1/2 acre lots with min/max of 100' of frontage (that would yield 40 houses on 1/2 acre lots).

Assume 25% of the 40 acres (10 acres) can have 1 acre lots with min/max of 200' frontage (that would yield 10 houses on 1 acre lots).

Assume 25% of the 40 acres (10 acres) can have 2 acre lots with min/max of 200' frontage (that would yeild 5 houses on 2 acre lots).

This results in 55 houses and if you have a lineal road, it would result in approximately 3,600 feet of road.

Conculsion: In both scenarios the road length is virtually the same, pointing towards the importance of establishing a maximum street length and encouraging loop roads.