Overview of Regulatory Strategies under Consideration

The Board of Selectmen and the Planning Board prompted by inquiries and concerns expressed to them from residents regarding the issue of tear downs and reconstruction of houses, sought to investigate the Town's zoning by-laws regarding this issue, and the overall topic as it affects the Town. The Planning Board was assigned to form a committee with representatives of Town boards, Planning, Selectmen, Design Review as well as industry professionals including builders, architects, realtors, and town residents.

Process:
The Committee began the process of discussing the topic of replacing existing houses with new larger houses (tear downs). Taken into discussion were the expressed concerns and letters from residents, a study into our current by-laws, and examination of surrounding municipalities and how they have approached their zoning regarding this topic.

The Committee started to focus in on regulatory options they wanted to explore and how those would impact both Town residents and the building community. In an effort to understand how existing houses might fit into these regulatory options,
the Planning Board staff and Building Department staff compiled a list of replacement houses in the last 2-3 years. The plans for these houses were analyzed and the data was compiled on square footage, lot coverage, and floor area ratio. This information was reviewed by a working group of the Committee and a list of study properties was created, along with questions for analysis of the properties. The houses included in the study covered both conforming lots and non-conforming lots. The houses varied as to compliance and non-compliance with the exploratory regulations.

The Committee members viewed the sites in person, and analyzed the houses according to the questionnaire and reported back to the Committee. The feedback of the members, and others who did the survey and tour, are the basis of the regulatory options proposed. The feedback from the tour was that interesting design features were more important than strict compliance with square footage and lot coverage limitations. It was observed that if by-laws could be amended that encouraged certain positive design elements, the result would help reduce the overall massing of larger construction, without significantly altering desired interior space composition. The spatial program assumed the standard house elements as a baseline. First Floor: 2 car garage, Living, Dining, Kitchen, Breakfast, Family Room, Mudroom, ½ Bath. Second Floor: Master BR with walk-in closets, Master Bath, 2nd Bath, Laundry, three additional Bedrooms.

Proposed:

- increase and encourage architectural variety by allowing various elements to be built within the front and side setbacks
    - Roof overhangs up to 18 inches (gutters not counted)
    - First floor bay windows projecting 2 ft max. up to 8 ft wide each, maximum of 25% of first floor wall area where the bay(s) occur
    - A portion of a covered landing or porch up to 50sf in front and 25 sf in side setbacks. Previously had to be uncovered, and if any portion was in the setback the total landing size was limited to 50sf.

    - Fireplaces projecting 2 ft maximum, either masonry or enclosure for gas fireplace
    - Bulkheads up to 40sf projecting a maximum of 7 ft.
- Change setbacks
    - Front setback: increase from 20 ft to 25ft or average of 150 ft each side of lot, whichever is greater, with a maximum of 35 feet. Corner lots only assess this on one street, the second street frontage (side) is a setback of 25 ft. Two car garages built within the first 35 ft are limited to one and one-half story designs. Full 2 1/2 story garage structure must occur beyond 35 ft from the front.
    - Side setback: measured to face of framing (see elements allowed in setback)
        - Conforming lot: increase from 12.5/14 ft to 14/16 ft. 32 ft of structure allowed at 14 ft setback line, the rest must offset 2 ft to 16 ft.
        - Non-conforming lot for frontage only: increase from 10 ft. to 12 ft. 32 ft of structure allowed at 12 ft setback line, the rest must offset 2 ft to 14 ft.
    - Rear setback: decrease to 15 ft.
    - Lot area coverage increased to 28%. Allowing a more relaxed lot coverage allows for additional design flexibility. This, in conjunction with allowing certain exemptions into the new adjusted setbacks encourages more architectural design features and helps reduce building massing. The FAR (see below) is now suggested to be the overall size control, while setback exemptions and relaxed lot cover will allow design flexibility and encourage a variety of design features.
    - Exclusions from lot coverage:
        - Covered porches and landings (unless habitable space is above)
        - Decks
        - Bulkheads
        - Fireplaces
        - Bay windows
- Add Floor Area Ratio calculation to the regulations. The key to FAR is always what counts as floor area and what does not. Many towns include complicated calculations of finished or unfinished basements, walk up attics, and garages, and count some portion or all of them as floor area to be regulated. This can lead to unnecessary changes to topography or roof pitch and design simply to avoid those areas being counted as floor area. Our approach concedes that every house has a foundation of some depth, and a roof of some appropriate design. Whether it is finished space, crawl space, or trussed attic, does not really impact the house structure and looks. Floor area counted will be defined as gross finished habitable area on the first and second floors. An additional 600 sf is allowed for garage space.

Lot Size (square feet)	**FAR**	**Maximum House size** (does not include basement or attic. 600 sf additional allowed for garage)
7,500 and under	.40	7,500 sf lot → 3,000 square feet
7,501 – 8,999	.38	8,500 sf lot → 3,230 square feet
9,000 – 9,999	.38	9,500 sf lot → 3,610 square feet
10,000 – 10,999	.38	10,500 sf lot → 3,990 square feet
11,000 – 11,999	.36	11,500 sf lot → 4,140 square feet
12,000 – 12,999	.35	12,500 sf lot → 4,375 square feet
13,000 – 13,999	.34	13,500 sf lot → 4,590 square feet
14,000 – 14,999	.33	14,500 sf lot → 4,785 square feet
15,000 and greater	.32	15,500 sf lot → 4,960 square feet

Lot Size	**Lot Count**	**Percentage Allocation**
Under 5,000	32	.4
5,000 thru 7,500	597	8.3
7,500 thru 10,000	1,121	15.6
10,000 thru 12,500	3,261	45.3
12,500 thru 15,000	1,053	14.6
Over 15,000	1,136	15.8
Total	7,200	

Building Height

Currently building height is measured from average grade at the face of the house walls. In general, the average height of replacement houses is much closer to the 35 foot height limit. There are numerous factors involved in this. One result has frequently been mounding of the grade along the perimeter of the house. This often results in altering the storm water runoff flow direction that had existed on the lot. Most original grading was part of a larger neighborhood watershed design. The mounding approach, when done on several lots, does not often work in concert with the larger neighborhood design.

Two options for measuring height are proposed, the choice is up to the applicant.

- Height is measured from average existing grade or average new grade, whichever is lower. Height limit is 35 feet. This approach works best on lots that are relatively level or slope up from the front.
- Height can alternatively be measured from a single point in the street centerline as the average of the highest 1/3 of the properties street frontage. The height limit is 32 feet when using this alternative. This approach works best on lots that slope down from the street front, which are at a disadvantage when measuring from average existing grade.

Retaining walls

A tiered approach for regulating retaining walls over 4 feet in height is proposed. Under current zoning regulations retaining walls covering less than one hundred square feet and having a height of less than 8 feet are unrestricted as to location on the lot. Retaining walls exceeding the noted parameters are defined as structures governed by the building height and setback standards of the zoning district in which they are located. This later provision effectively permits a retaining wall having a height of 35 feet to be placed 5 feet from a side property line as-of-right in the Single Residence B zoning district.

In summary, the proposed retaining wall regulations would allow retaining walls less than 4 feet in height and having a length not exceeding 40 percent of the lot's perimeter to proceed as-of-right; such shorter walls would be exempt from the building permit, design review and setback requirements of the underlying district. Taller walls greater than 4 feet in height would require an increased level of review depending on height and required setback from front, side and rear property lines.

The review process would begin with retaining walls over 4 feet in height, and as the walls increase in height so would the level of review. The review process requires retaining walls between 4 and 12 feet to acquire a building permit from the Town's Building Inspector prior to construction. Any of these retaining walls located within the setback area also require a special permit. This requirement is consistent with the State Building Code requirement for retaining walls over 4 feet in height. A special permit is also required for all retaining walls over 12 feet in height from the Zoning Board of Appeals, prior to the issuance of the building permit. As part of the special permit process the retaining walls will be reviewed by the Design Review Board. The Board of Appeals and Design Review Board would assess the preservation and enhancement of landscaping, including how proposed retaining walls would be harmonious with the general appearance of neighboring properties through location, design, and proposed landscaping. The Board of Appeals and Design Review Board would also assess whether the height, scale, materials, textures, and colors of proposed retaining walls are harmonious with the terrain, use, scale and architecture of existing buildings (and hardscapes/landscapes) within their vicinity. A finding would further be required by the Board of Appeals stating that the requested retaining wall did not adversely impact adjacent property or the public.

In the setback areas terraced retaining walls that are 4 feet or less in height and are separated by a distance at least one times the height of the taller wall would be considered separate walls and would be exempt from review. Terraced retaining walls that are separated by a distance less than one times the height of the taller wall are considered as a single wall having a height equal to the sum total of the heights of each wall and would need to meet applicable provisions of the regulations. Allowance is provided for retaining walls located within the required setback area which provide access to a garage or egress doors at the basement level. In those circumstances the height of the retaining wall may graduate in height from 4 to 7 feet with the wall limited to 7 feet in height for not more than 25% of the wall's overall length.

A survey of the zoning by-laws of comparable communities to Needham indicates that most of these communities have by-laws restricting retaining walls. Usually these by-laws simply classify retaining walls in excess of 4 feet as structures, which requires all such walls to comply with building setback requirements. The Large House Review Study Committee believes that in many cases retaining walls greater than 4 feet are justified to improve the use of property while not adversely affecting neighboring properties. As a result, the proposed by-law does not impose any absolute limitations but seeks to impose increasing levels of review as walls increase in height.