SCHLESINGER AND BUCHBINDER, LLP
ATTORNEYS AT LAW
1200 WALNUT STREET
NEWTON, MASSACHUSETTS 02461-1267

STEPHEN J. BUCHBINDER
ALAN J. SCHLESINGER
LEONARD M. DAVIDSON
HEATHER G. MERRILL
PAUL N. BELL
KRISTINE H.P. HUNG
KATHERINE BRAUCHER ADAMS
FRANKLIN J. SCHWARZER
JONATHAN A. GOLDMAN

TELEPHONE (617) 965-3500
FACSIMILE (617) 965-6824

OF COUNSEL
ROBIN GORENBERG

June 27, 2013

Linda Finucane, Clerk
Board of Aldermen
City of Newton
1000 Commonwealth Avenue
Newton, MA.

Re: 170 Needham Street

Dear Linda;

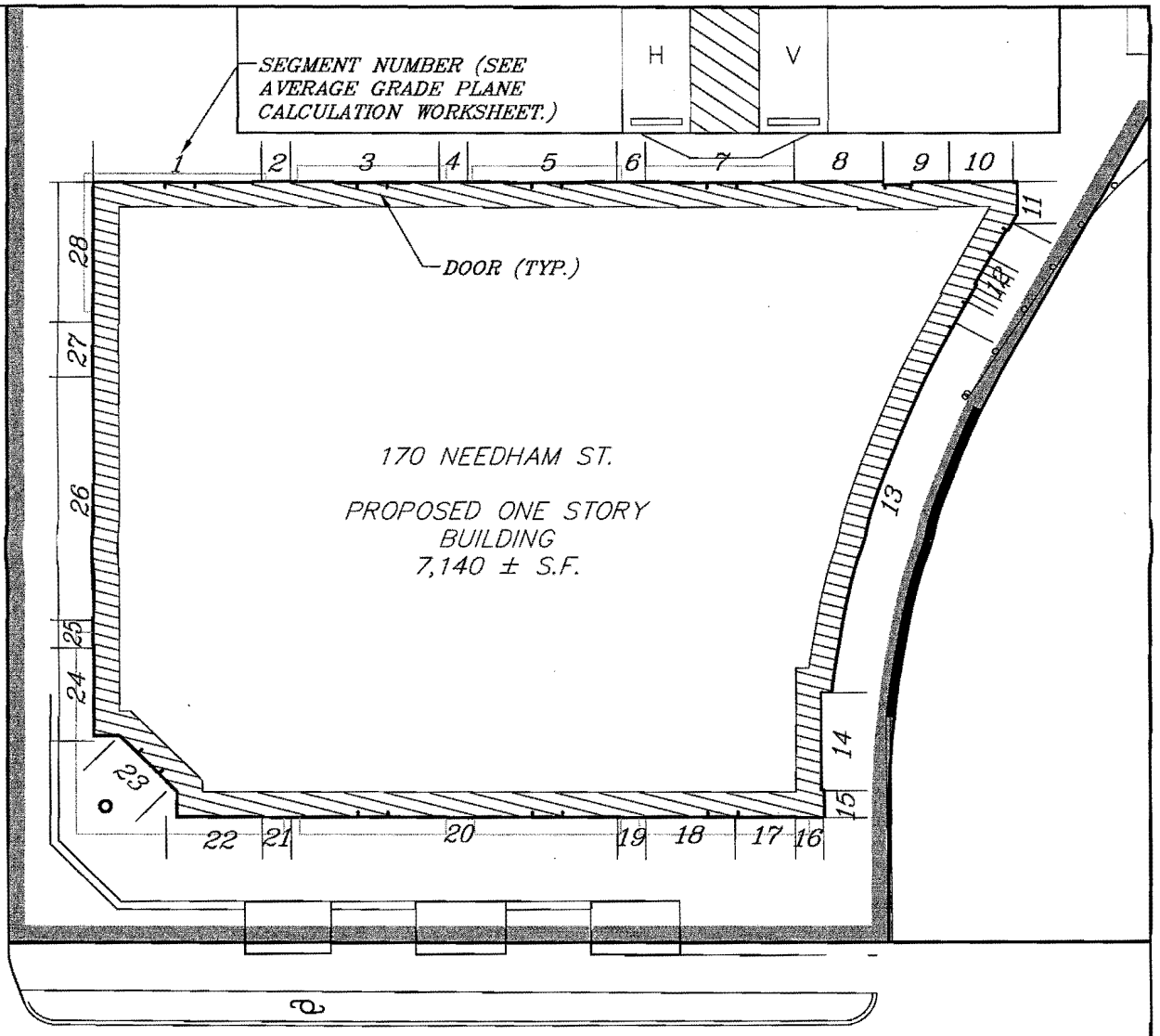
Enclosed is the Building Height Exhibit for the filing for 170 Needham Street.

Very truly yours,

Alan J. Schlesinger

AJS:dnb

Cc: Alexandra Ananth



NEEDHAM STREET

(PUBLIC – 60' WIDE)

FIRST FLOOR ELEVATION	110.0
HIGHEST RIDGE ELEVATION	134.5
AVERAGE GRADE PLANE ELEVATION	110.0
MAX. PERMITTED RIDGE ELEVATION	146.0

DATE: 06/26/13

SCALE: 1"= 20'

170 NEEDHAM ST.
NEWTON, MA

BUILDING HEIGHT EXHIBIT

KELLY ENGINEERING GROUP, INC.
CIVIL ENGINEERING CONSULTANTS
0 CAMPANELLI DRIVE • BRAINTREE • MA 02184
PHONE: 781 843 4333 FAX: 781 843 0028

2013-028-M100-BLDG-HT

ORDINANCE #Z-90 – AVERAGE GRADE PLANE

June 6, 2011

BE IT ORDAINED BY THE BOARD OF ALDERMEN OF THE CITY OF NEWTON AS FOLLOWS:
That the Revised Ordinances of Newton, Massachusetts, 2007, as amended, be and are hereby further amended with respect to Chapter 30 Zoning Section 30-1, **Definitions,** as follows:

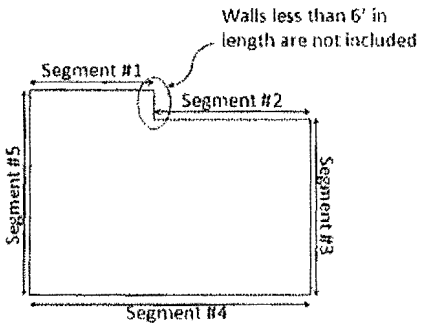
1. Delete the title and text and diagrams of the definition of *"Grade Plane"* in their entirety and insert in place thereof the following language and diagrams:

   Grade Plane, Average: A horizontal reference plane for a building as a whole representing the average of finished grade elevations around the perimeter of a building, as determined by the length-weighted mean formula below. All walls of length greater than six feet shall be included in segments of consistent grade or slope.

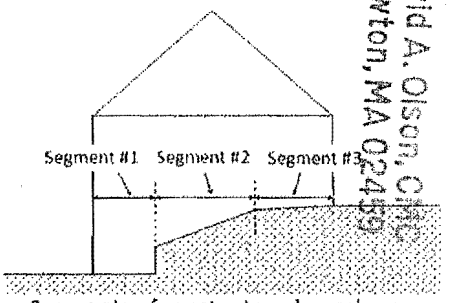
$$\frac{\Sigma\,[(e1 + e2)12 \times L]}{P}$$

   Where:

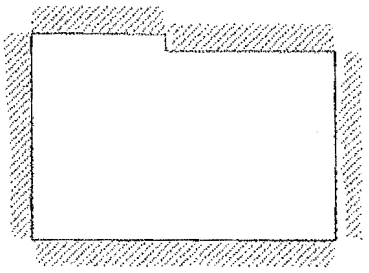
   - Σ sums the weighted average grades of all segments;
   - e1 and e2 are the elevations of the finished ground level at the respective ends of each segment, determined as the lowest point at each end of the segment within six feet of the foundation or the lot line, which ever is closer;
   - L is the corresponding horizontal length of the segment; and
   - P is total horizontal length of all segments.



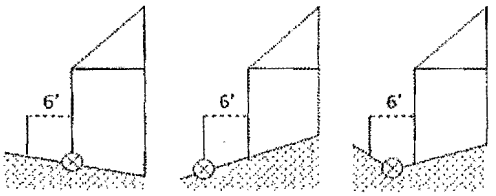
Determining Segments
Plan View



Segments of constant grade or slope
Section View



Segment ends use lowest elevation within 6'
Plan View



Segment ends use lowest elevation within 6'
View along segment

AVERAGE GRADE PLANE CALCULATION WORKSHEET

Prepared by: Hilde Karpawich, Kelly Engineering Group, Inc. (print)

Hilde Karpawich (signature) 06/26/13 (date)

A	B	C	D	E	F
Segment	Length of segment in feet	Elevation of end point 1*	Elevation of end point 2*	E = (C+D)/2 Average Segment Elevation	F = B x E
1-10	107.5'	110.0	110.0	110.0	11,825.0
11-15	81.5	110.0	110.0	110.0	8,965.0
16-28	153.2	110.0	110.0	110.0	16,852.0
TOTAL	342.2'(G)		37,642(H)		

	Final Average Grade		110.0
	H / G =	110.0	

* C and D are the elevations of the finished ground level at the respective ends of each segment, determined as the lowest point at each end of the segment within six feet of the foundation or the lot line, which ever is closer.