## CITY OF KIRKLAND

Planning and Community Development Department
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## CALCULATING AVERAGE BUILDING ELEVATION

NOTE

INCOMPLETE AVERAGE BUILDING ELEVATION INFORMATION COULD SUBSTANTIALLY DELAY THE PROCESSING OF YOUR APPLICATION

No part of a structure may exceed the maximum height above "Average Building Elevation" specified in the applicable use zone section of the Zoning Code except for minor elements of a structure as specified in Zoning Code Section 5.10.045 defines Average Building Elevation as:
"The weighted average elevation of the topography, prior to any development activity, either at the center of all exterior walls of a building or structure, either (Option 1) under the footprint of a building as measured by delineating the smallest rectangle which can enclose the building footprint and then averaging the elevations taken at the midpoint of each side of the rectangle or (Option 2) a second, more complicated, option for calculating Average Building Elevation is available. Contact the Planning Department at 425-587-3225 for details. When a building or structure contains townhouses or other attached but otherwise independent building units the average building elevation is calculated separately for each unit."

# AVERAGE BUILDING ELEVATION FORMULA 

Option 1
(Midpoint Elevations) x (Length of Wall Segments)
(Total Length of Wall Segments)


Calculating Average Building Elevation
$\frac{(\mathrm{Ax} \mathrm{a})+(\mathrm{B} \mathrm{x} \mathrm{b})+(\mathrm{C} \mathrm{x} \mathrm{c})+(\mathrm{D} \mathrm{x} \mathrm{d})}{\mathrm{a}+\mathrm{b}+\mathrm{c}+\mathrm{d}}=$ Average Building Elevation $(\mathrm{ABE})$
Where A, B, C, D...= Existing Ground Elevation at Midpoint of Rectangle Segment* And $\mathrm{a}, \mathrm{b}, \mathrm{c}, \mathrm{d} . . .=$ Length of Rectangle Segment

Midpoint Elevation

> Rectangle Segment Length

| $\mathrm{A}=105.6$ | $\mathrm{a}=47^{\prime}$ |
| :--- | :--- |
| $\mathrm{B}=102.5$ | $\mathrm{~b}=40^{\prime}$ |
| $\mathrm{C}=101.9$ | $\mathrm{c}=47^{\prime}$ |
| $\mathrm{D}=105.2$ | $\mathrm{~d}=40^{\prime}$ |

Site Plan
Not to scale
CALCULATION EXAMPLE:
$\frac{(105.6)(47)+(102.5)(40)+(101.9)(47)+(105.2)(40)}{47+40+47+40}=\frac{18,060.5}{174}=103.80 \mathrm{ABE}$
*Rectangle shall not include those items allowed to extend into required yards through KZC 115.115(3)(d).

