

Residential Neighborhood Character & the Issue of Looming



Presented by:

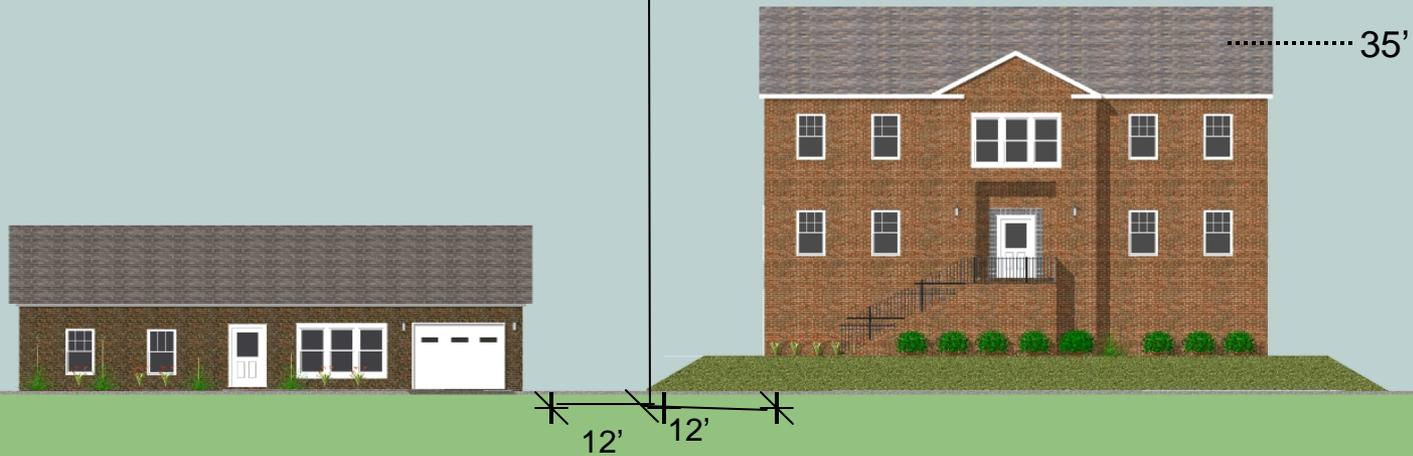


SOME APPROACHES THAT CAN BE USED TO REDUCE LOOMING

- ✓ MEASURING BUILDING HEIGHT FROM ORIGINAL GRADE OR FINISHED GRADE, WHICHEVER IS LOWEST
- ✓ ANGLE OF BULK PLANE
- ✓ SETBACK RATIO

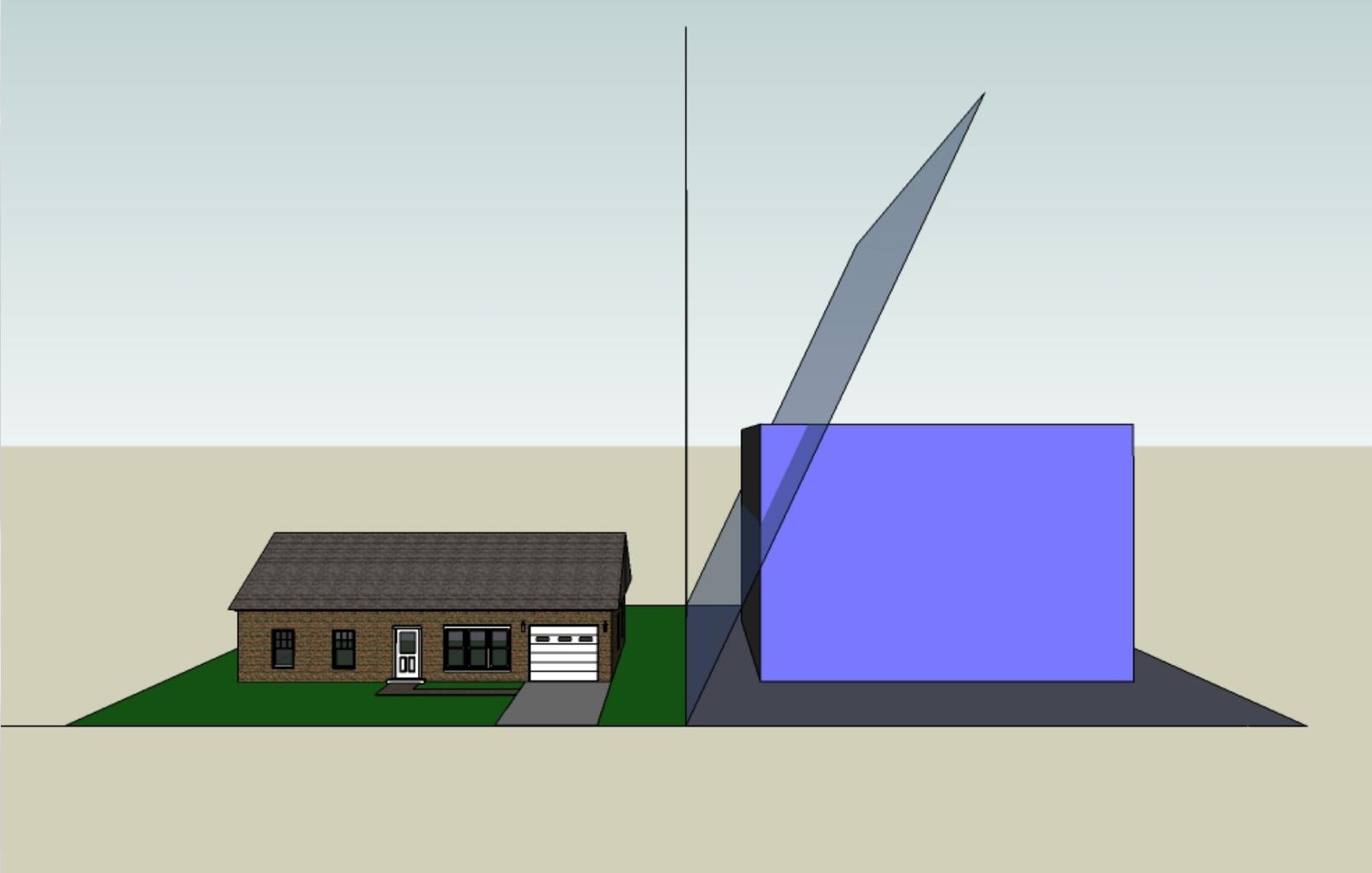


Building Height Measurement Taken From Top of Fill Would No Longer Allowed Under Proposed Regulation



R-3 District Example

Angle of Bulk Plane: an inclined plane drawn at a specific angle from vertical that contributes to the delineation of maximum permitted bulk that can be constructed on a lot



The Setback Ratio Alternative

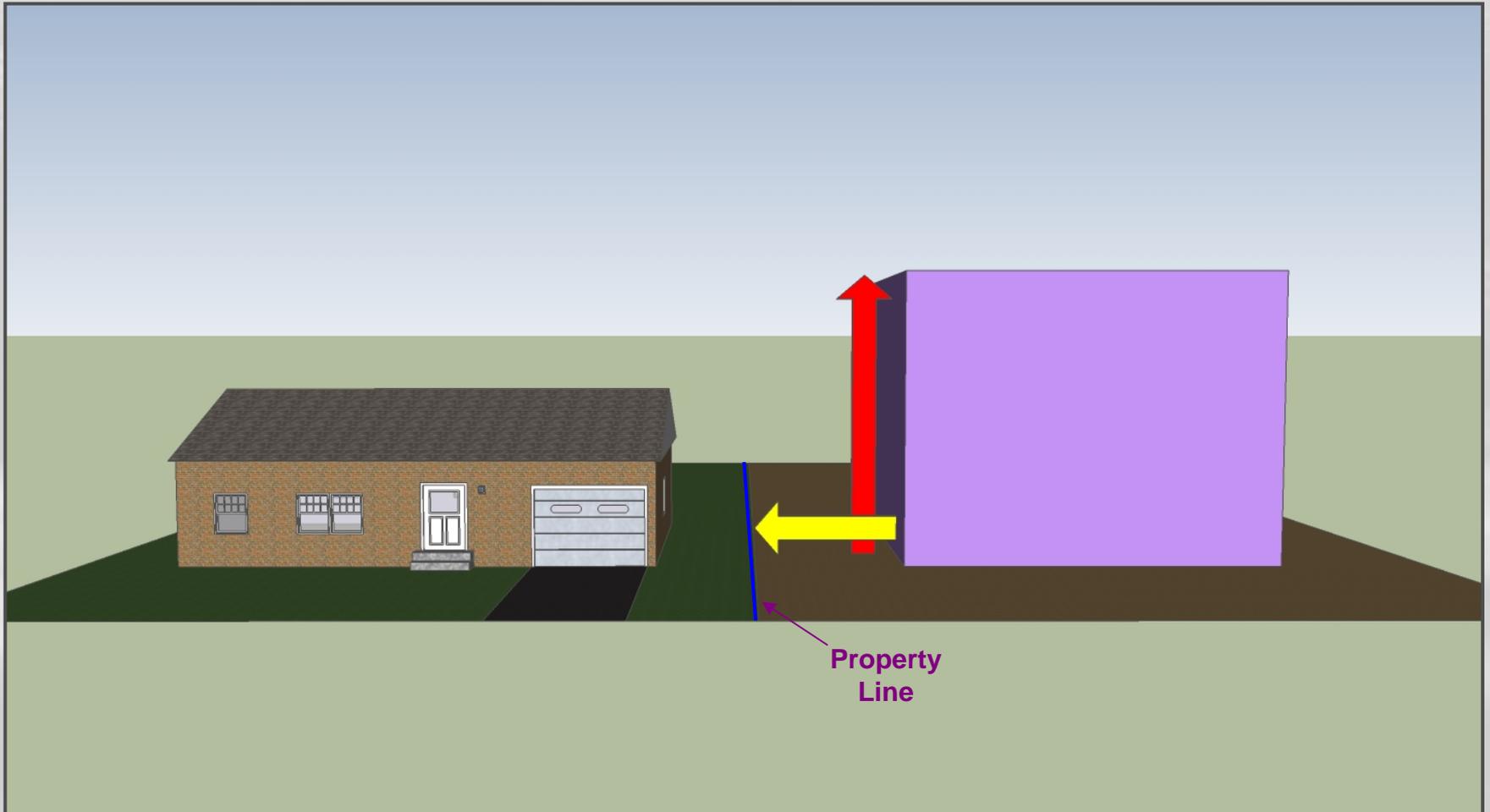
The purpose and intent of a Setback Ratio, as proposed, is to limit the massing and looming effects of single family residential structures that are built in close proximity to neighboring residential property.

It represents a potentially less complicated and more cost efficient alternative to an Angle of Bulk Plane.

The two methods share some characteristics in terms of design and outcome. It is possible to designate a setback ratio that yields comparable results to what can be achieved by using an Angle of bulk Plane.

Setback Ratio

The relationship of the horizontal distance (building to nearest side lot) **AND** the vertical distance (side building height from avg. grade)
(Distance:Height)



What Does a Setback Ratio Do?

- It reduces the amount of bulk that can be built in a ‘looming’ position relative to a side lot line.
- It provides a simple linear formula (distance to height) by which looming can be controlled by establishing a desired building height to building setback relationship.
- It can be used in conjunction with existing minimum side yard and maximum building height requirements which would remain in effect.

Adaptive Use of Alexandria's Setback Ratio

- Fairfax County has many more Zoning Districts that allow single family detached dwellings compared to the City of Alexandria, 9 vs. 5.
- Fairfax also has a greater range of corresponding minimum required side yards (setbacks), 20' – 8'
vs. 12' – 7'
- Additional Setback Ratios would be needed to address the greater range of setback distances; the 1:2 & 1:3 ratios used in Alexandria would

ALEXANDRIA SETBACK RATIOS

Used in Single-Family Residential Districts

Zoning District	R-20	R-12	R-8	R-5	R-2-5
Minimum Lot Size	20,000 ft ²	12,000 ft ²	8,000 ft ²	5,000 ft ²	5,000 ft ²
Min. Req. Side Yd.	12'	10'	8'	7'	10'
Setback Ratio	1:2	1:2	1:2	1:3	1:3

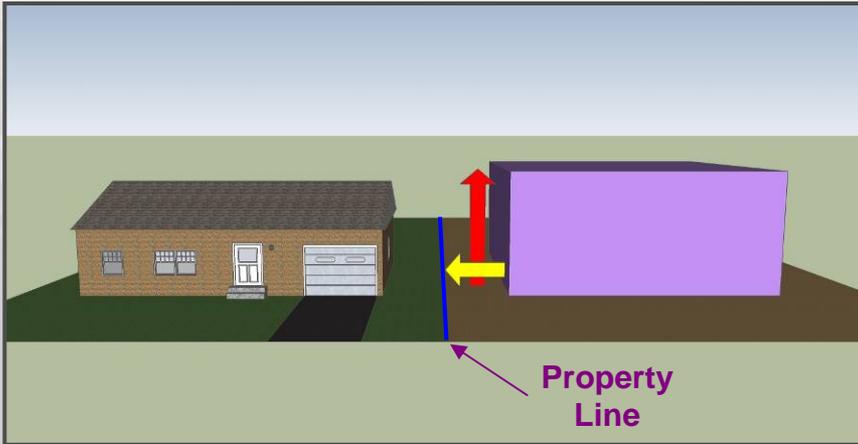
PROPOSED FAIRFAX COUNTY SETBACK RATIOS

Zoning District	Minimum Lot Area	Minimum Side Yard	Setback Ratio
R-1, R-C, R-E*	36,000 sq. ft.	20 feet	4:5
R-2	15,000 sq. ft.	15 feet	4:7
R-3	10,500 sq. ft.	12 feet	1:2
R-4	8,400 sq. ft.	10 feet	2:5
R-5**	5,000 sq. ft.	8 feet	1:3
R-8**	5,000 sq. ft.	8 feet	1:3
R-MHP**	5,000 sq. ft.	8 feet	1:3

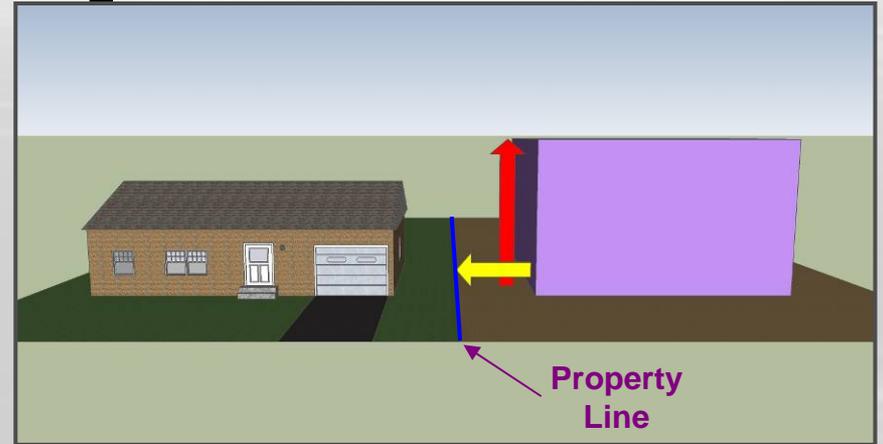
*As Proposed, Setback Ratio would not be applicable to lots in the R-1, R-C, & R-E Districts that are > 36,000 sq. ft.

**As Proposed, Setback Ratio would apply only to Single Family Detached Dwellings in the R-5, R-8, & R-MHP District

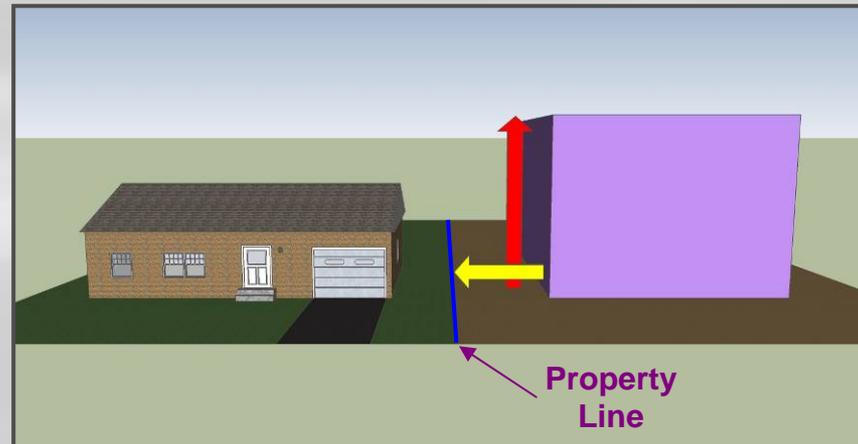
Portion of building nearest a property line can increase in size as setback distance increases (1:2 Example)



12' Setback, Building Height 24'

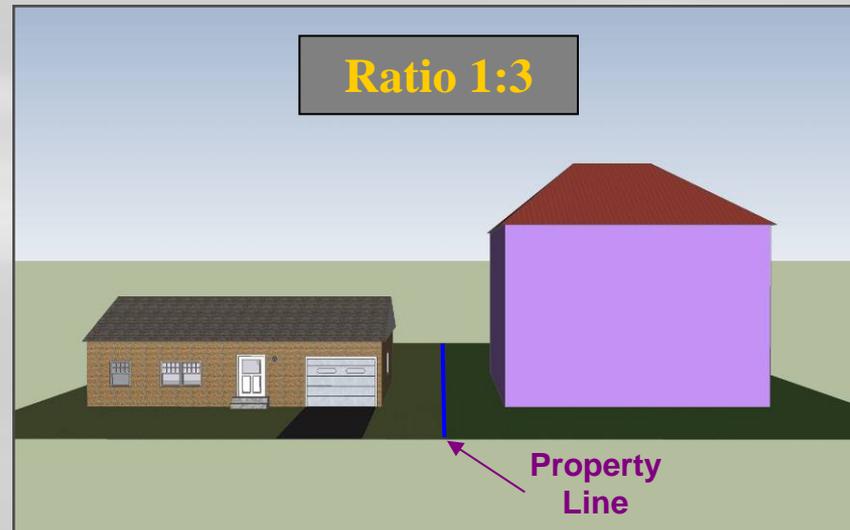
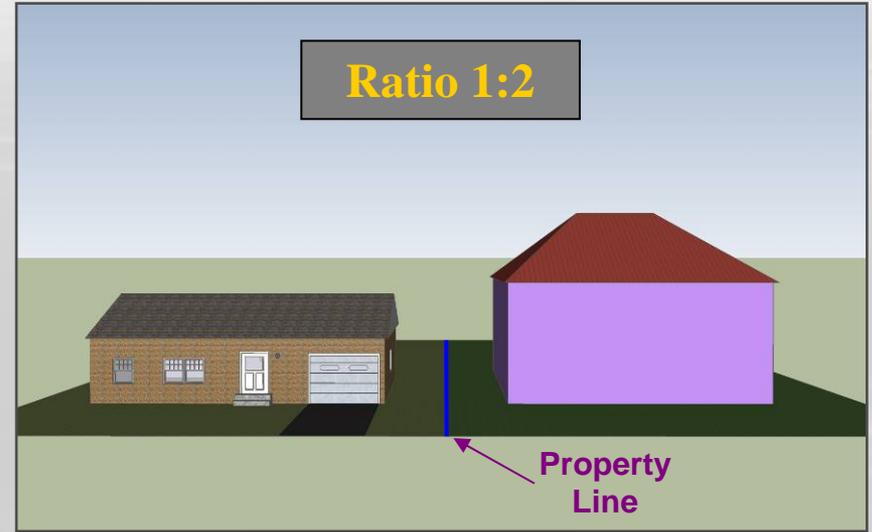
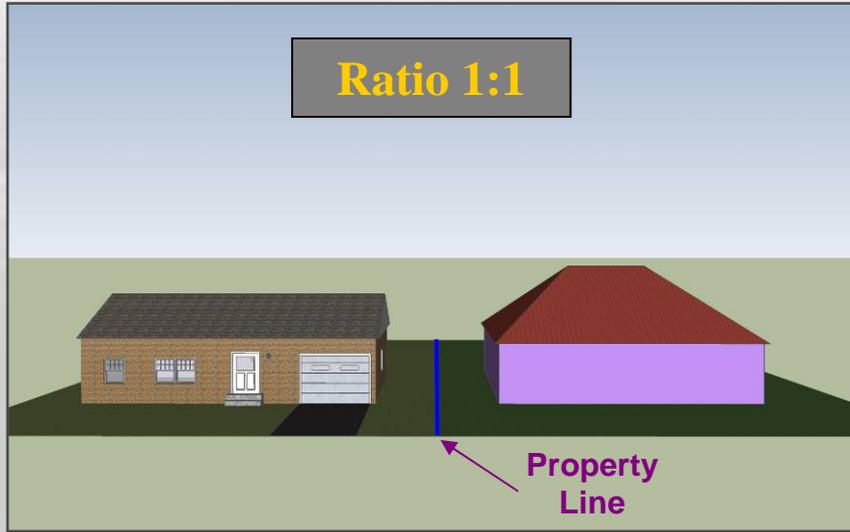


15' Setback, Building Height 30'



18' Setback, Bldg. Ht. 35' = Max. Bldg. Ht.

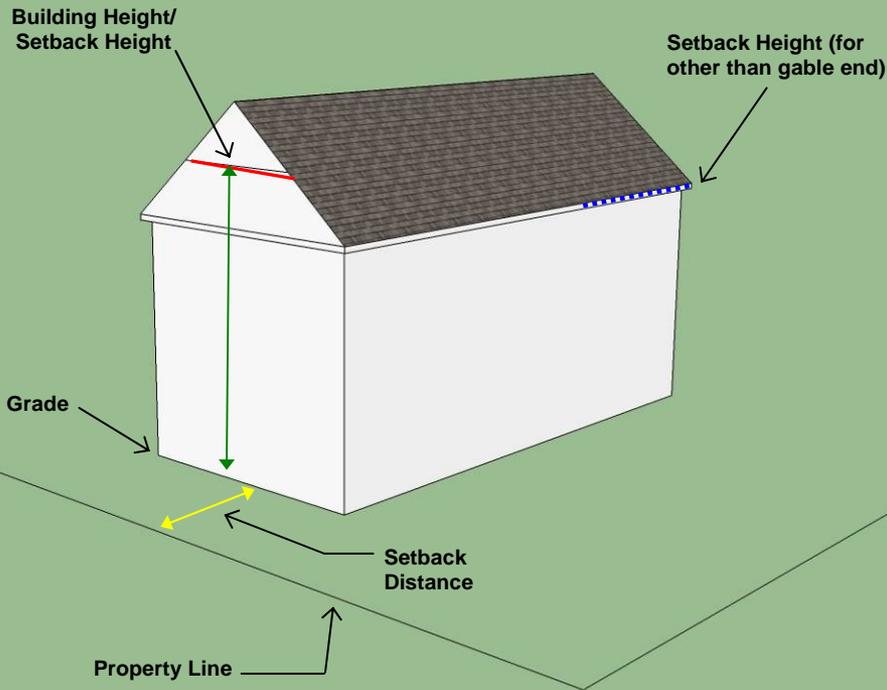
Setback ratio can be adjusted according to degree of looming control that is desired



How the Vertical (Height) Component of a Setback Ratio is Measured

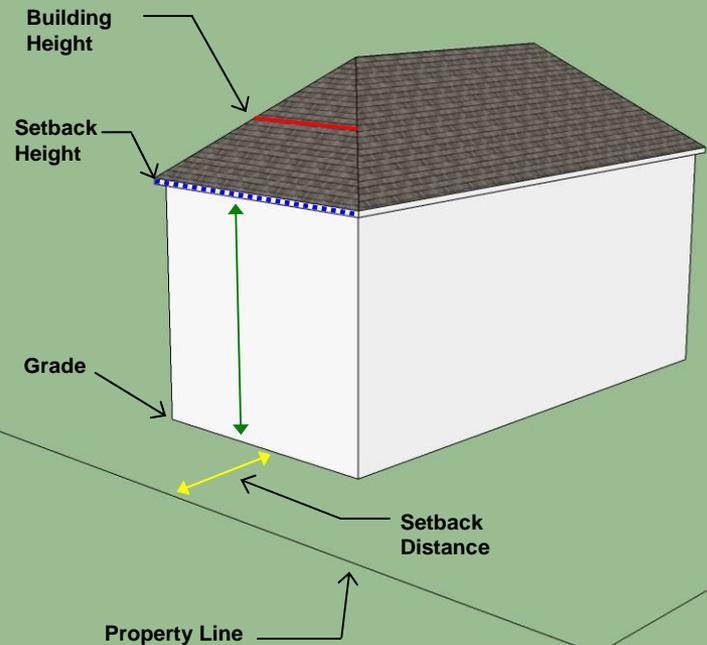
Gable Roof

Setback Height Measured to Roof Mid-Point



Hip Roof

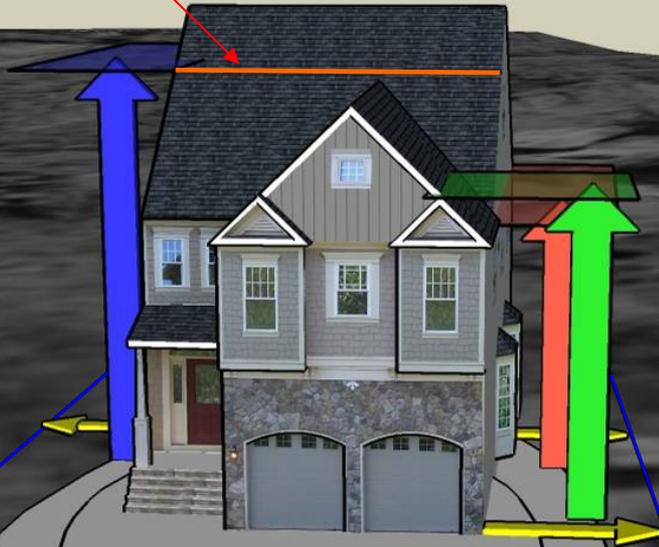
Setback Height Measured to Gutter Line



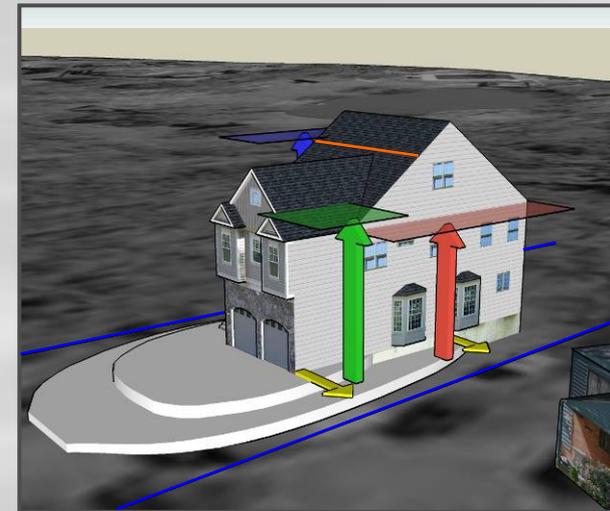
Gable Roof Example (1:2 Ratio)

35' Maximum Building Height

(Mid-Point of Roof cannot be above this line)



Side Lot Lines



Setback at Right Side is 12' : Setback Ratio Height = 24'

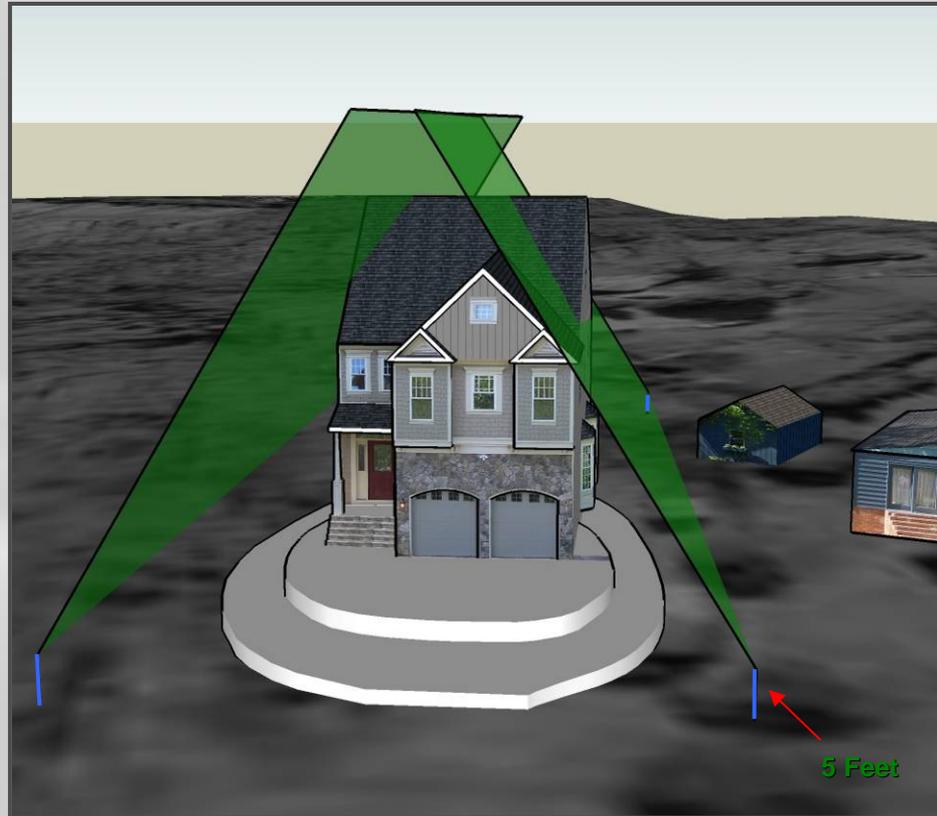
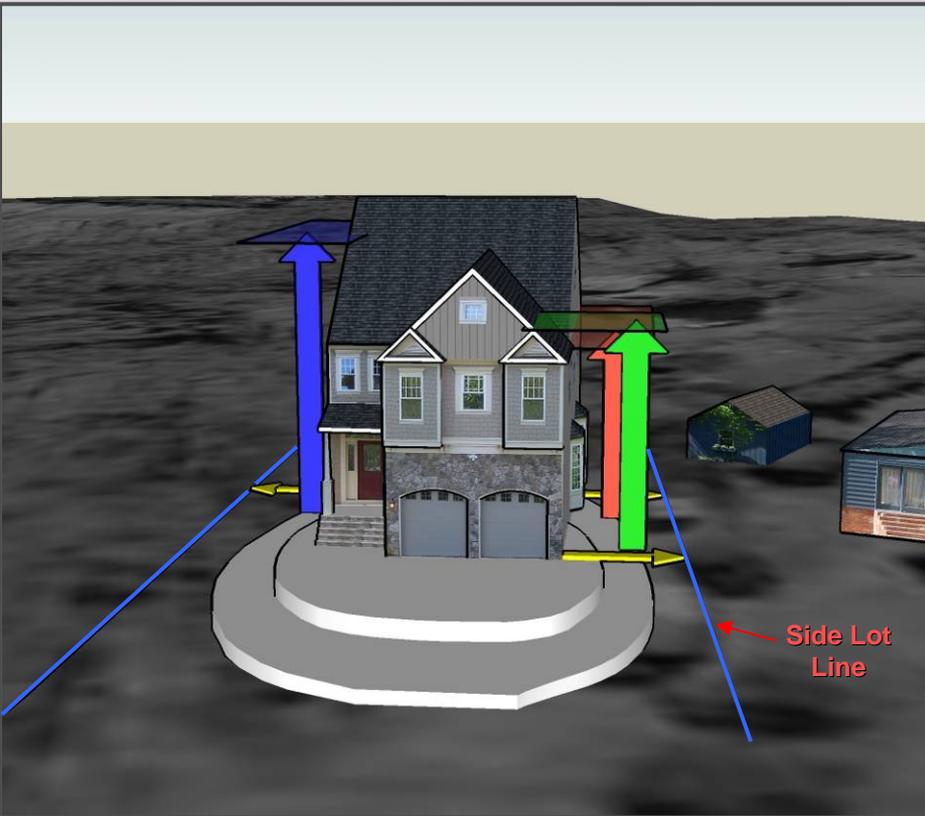
Setback at Right Side is 13' : Height at Gutter cannot Exceed 26'

Setback for Rt. Side is 18' : Setback Ratio Height = 36' / Max. Bldg. Ht. = 35'

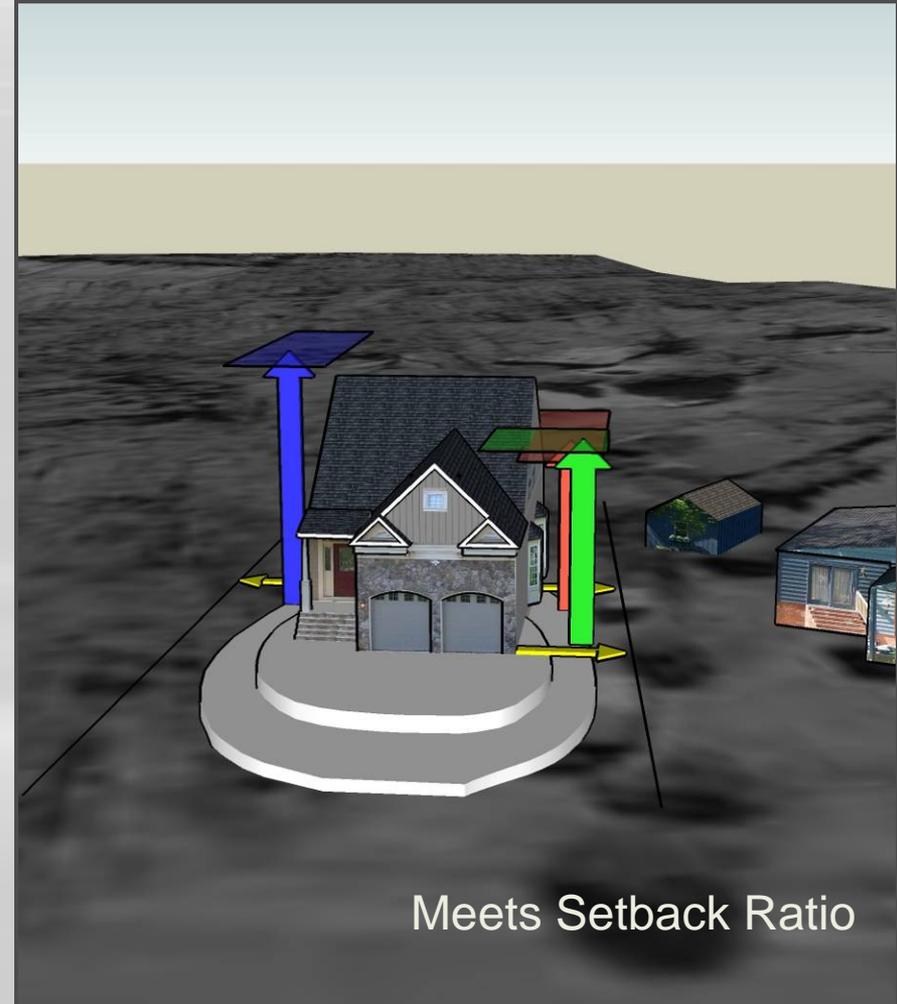
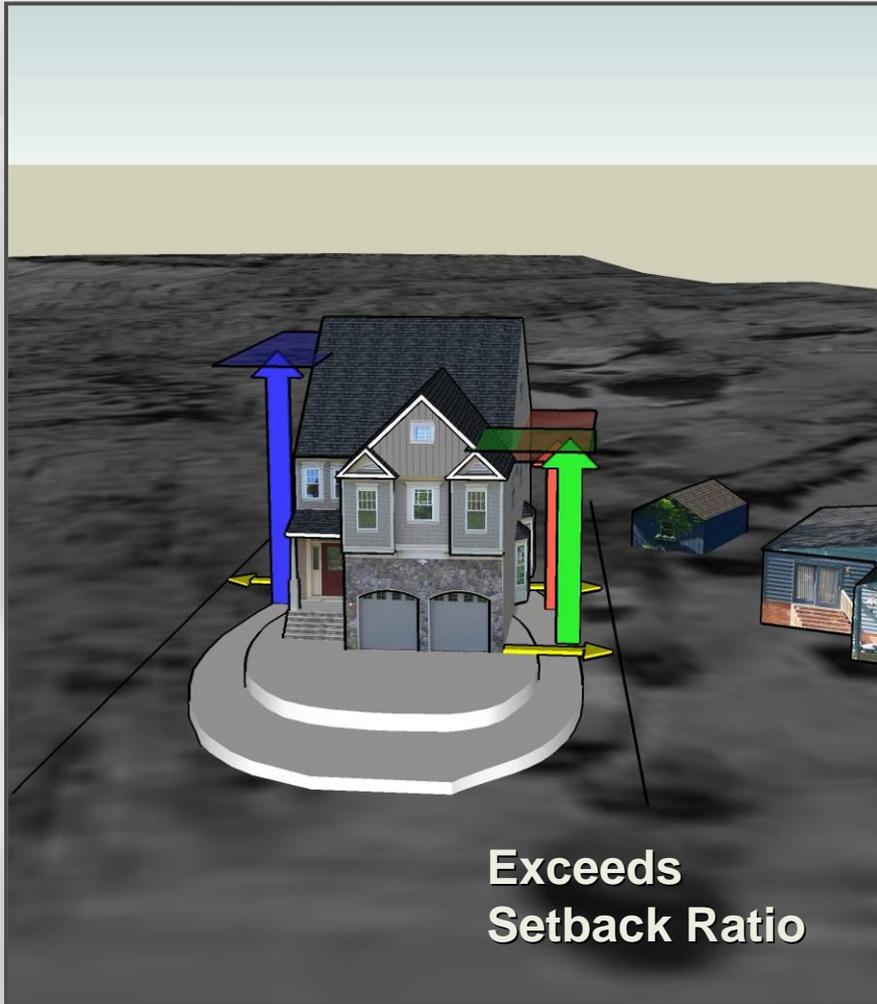
Setback Ratio/Angle of Bulk Plane Comparison

Setback Ratio 1:2

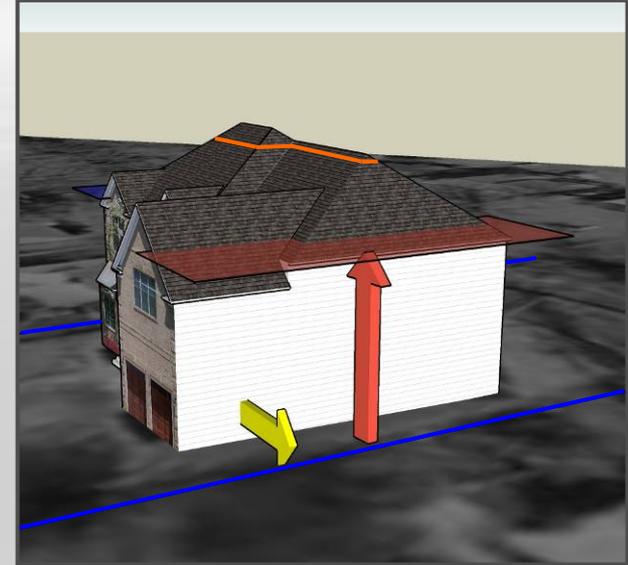
Angle of Bulk Plane
31° Angle @ 5 Feet



Setback Ratio Met By Reducing House Size



Hip Roof Example A

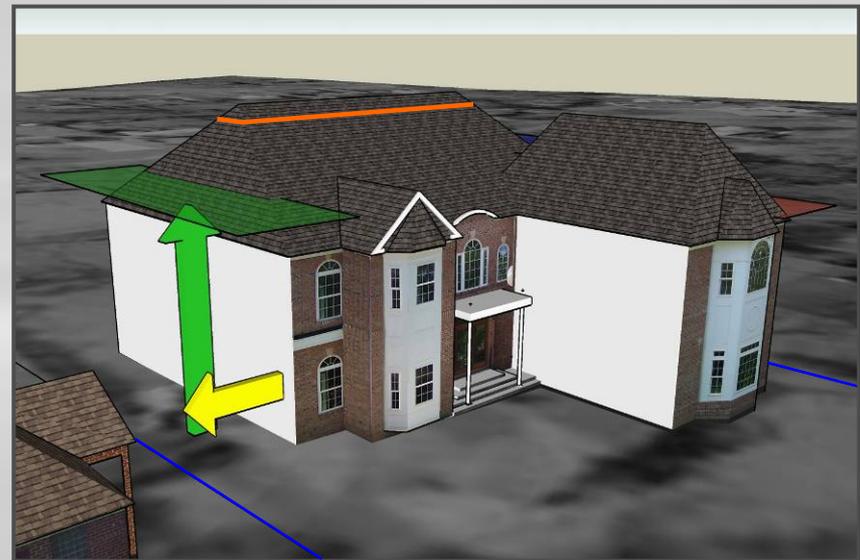
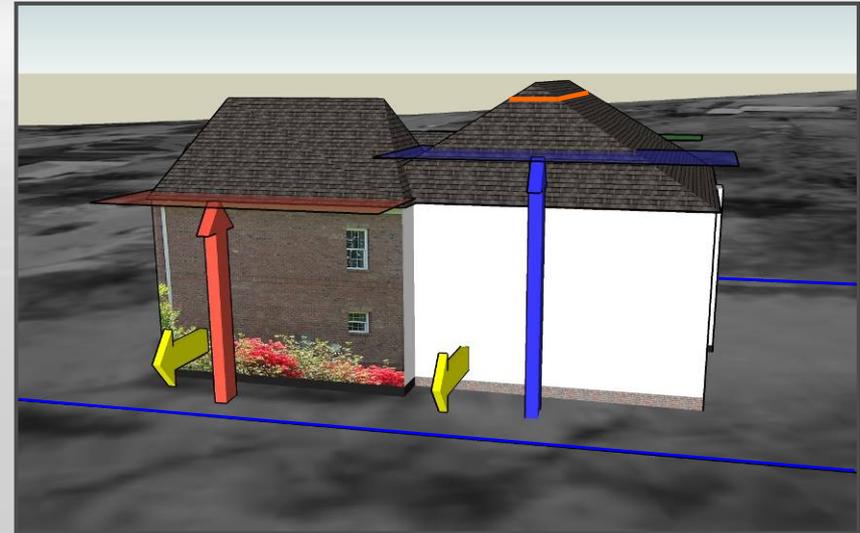
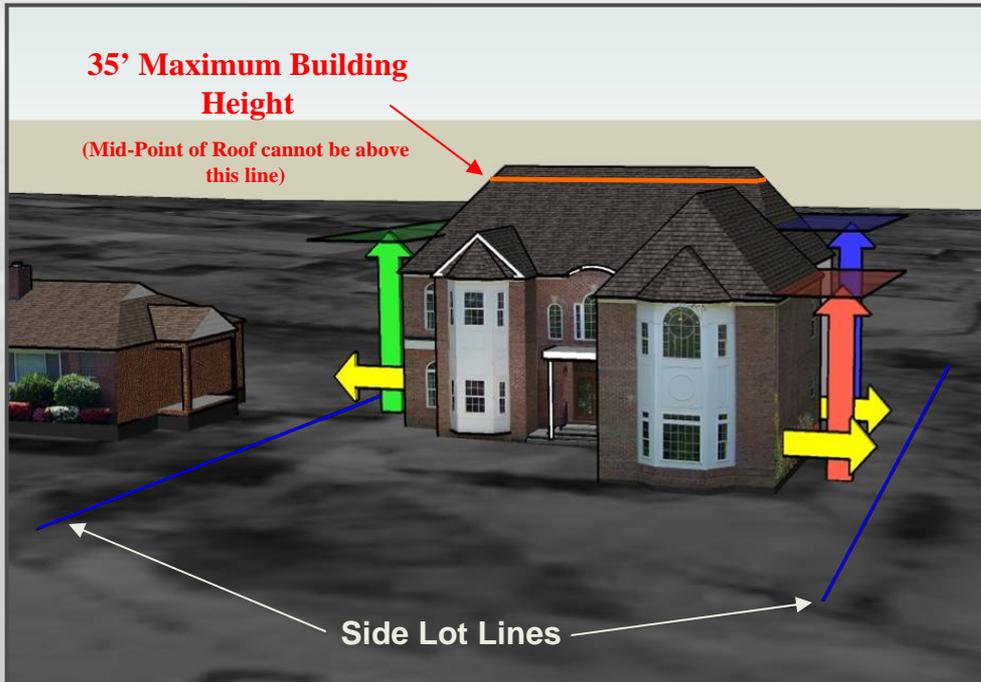


Setback at Right Side is 12' : Setback Height at Gutter Cannot Exceed 24'

Setback at Left Side is 13' : Setback Height at Gutter Cannot Exceed 26'

This 2-story dwelling meets existing bldg. height regs & would meet proposed setback ratio requirements.

Hip Roof Example B



Setback at Right Side is 12' : Setback Height at Gutter Cannot Exceed 24'

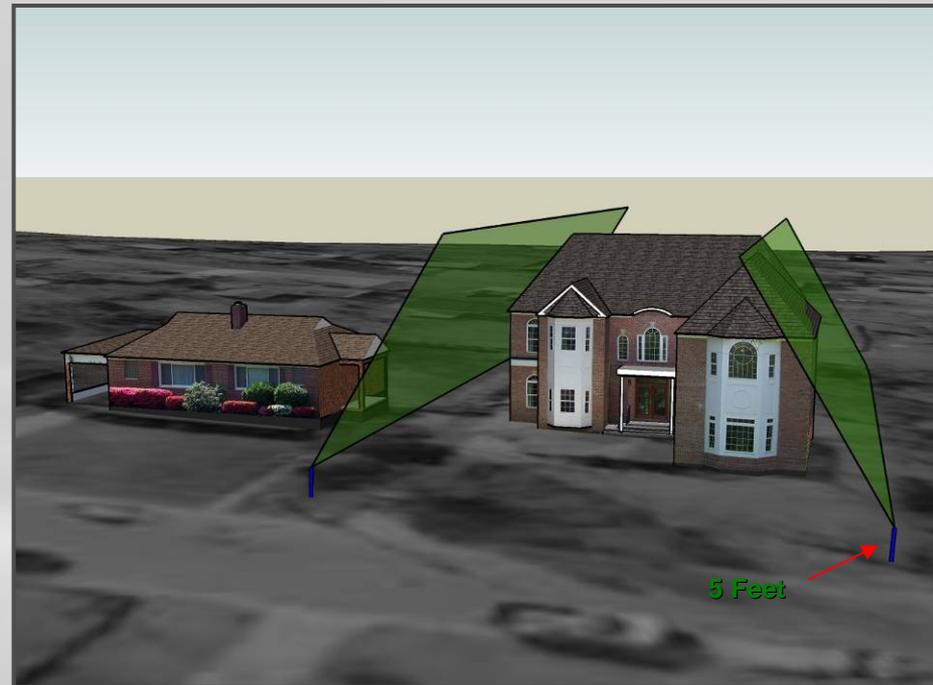
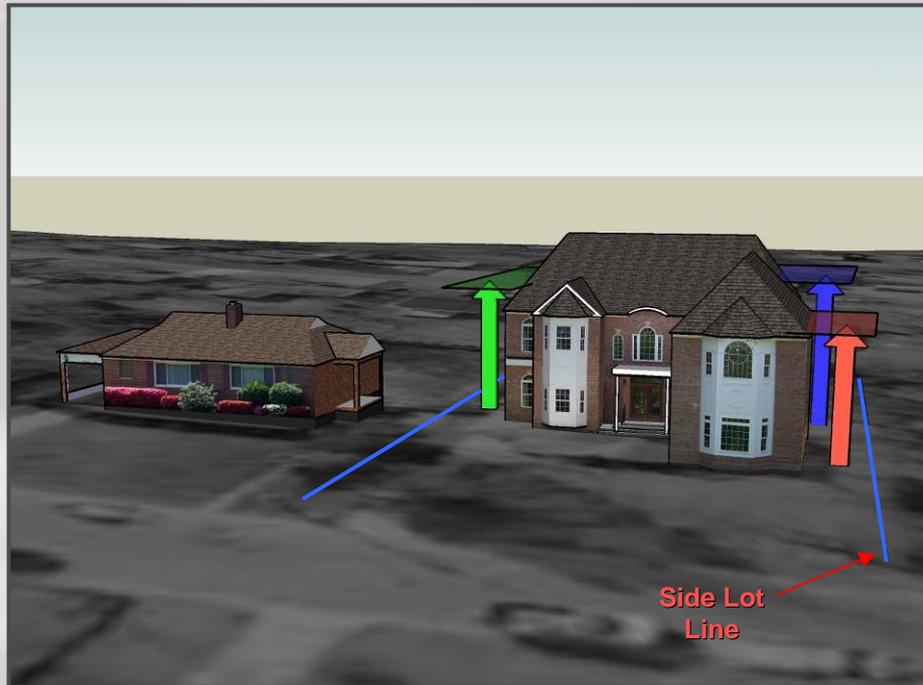
Setback at Right Side is 15' : Setback Height at Gutter Cannot Exceed 30'

Setback at Left Side is 13' : Setback Height at Gutter Cannot Exceed 26'

Setback Ratio/Angle of Bulk Plane Comparison

Setback Ratio 1:2

Angle of Bulk Plane
31° Angle @ 5 Feet



Multiple Building Faces

R-3 Zoning District with a Setback Ratio 1:2

