



**CITY OF SAINT PAUL**  
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**DATE:** February 14, 2020  
**TO:** Comprehensive and Neighborhood Planning Committee  
**FROM:** Mike Richardson, City Planner  
**SUBJECT:** Districts 14 and 15 Residential Design Standards Amendments

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### **Purpose**

The purpose of this memo is to present additional analysis related to residential design standards in Districts 14 and 15 adopted in 2015 and give recommendations to amend the Zoning Code.

### **Background**

On September 2, 2015, amendments to the zoning code went into effect that modified some residential dimensional and design standards in Districts 14 and 15. They were intended to address a trend of house teardown and reconstruction that led to homes that:

- pushed the boundaries of what dimensional standards allowed
- were perceived to be out of character with existing housing stock
- created negative visual and light access impacts for neighboring properties due to long, tall, and unbroken building facades.

In general, the standards have been successful. However, two elements have emerged as problematic in their implementation – sidewall articulation and height.

### *Issues with Current Language*

1. Height and articulation requirements don't effectively account for reuse of all or part of a building.
2. Reduced height limits don't account for modern truss systems, especially when building near setback line.
3. The District Councils and Board of Zoning Appeals (BZA) consistently find that some elements of design (i.e. roofline variation and chimneys) meet the intent of the 2015 standards, but don't meet the strict articulation requirements in the code.

### *Goals for Potential Amendments*

1. **Maintain the original intent.** The District Councils and residents have been clear in meetings that they do not want to completely eliminate requirements for articulation and height.
2. **Reduce number of unnecessary variances.** Variances are costly for applicants and staff in terms of time and money and potentially have the effect of stifling reinvestment in housing stock. Focusing time and money on variances that address the intent more precisely is in the public interest.
3. **Avoid barriers to implementation.** Any new language or process should be easily implementable by staff by being clear about intent and interpretation.

### *District Council Involvement*

The Macalester-Groveland Community Council and Highland District Council have been heavily involved since the initiation of the original amendments in 2014, including review of the original language, providing feedback to staff in March of 2016 and late fall of 2019, and the conducting numerous application reviews over the last four years. Staff will return to the district councils in mid-February with the information and recommendations in this report and to advise them of ways to engage through a possible adoption process.

## **Analysis**

### *Inventory and Clarifications*

Additional information has been acquired for projects in Districts 14 and 15 that did not require a variance to better understand the overall activity and inform potential amendments.

Using data acquired from the City's AMANDA system, there were at least 208 building permits issued for individual properties in Districts 14 & 15 that were considered additions or new construction (since the subject regulations went into effect). The projects ranged from small porch additions to new large homes. In order to break down the large number of projects into a manageable sample for closer examination, the list was divided into quartiles by value. Equal numbers of projects from each quartile were selected based on availability of photographs, plans and reports. A complete methodology is available upon request.

Of the variance applications submitted since September of 2015, the Board of Zoning Appeals has granted 25 of 27 articulation variances and 16 of 18 height variances (see Table 1). The District Councils provided recommendations for 23 of the applications and recommended approval for all but one articulation request in 2019.

Table 1 - Articulation and Height Variance Summary

	Articulation		Height	
	# of Variance Requests	# Granted by BZA	# of Variance Requests	# Granted by BZA
2015 (Q4)	6	5*	6	5
2016	5	5	0	N/A
2017	2	2	3	3
2018	6	6	6	6
2019	8	7	3	2
Total	27	25	18	16

\*Partial approval – west side approved, east denied

Staff in the Department of Safety and Inspections were consulted about terms used in evaluating and documenting projects. These terms are key in maintaining consistency with any zoning text language and the way DSI does their work.

“New construction” is a project on a cleared lot, but *also includes a new house built on existing foundation.*

“Addition” includes anything that results in an increase in floor area or height (horizontal or vertical expansion).

“Remodel” does not include exterior change to the structure of the house. DSI considers decks as a remodel for the purpose of issuing a permit.

Finally, a reminder about how the zoning code defines how to measure building height. Sec. 60.203 says that building height is “The vertical distance measured from the established grade to the highest point of the roof surface for flat and shed roofs; to the break line of mansard roofs; and to the average height between eaves and ridge for gable, gambrel, and hip roofs...”

*Draft Modifications to the Standards*

There were a number of approaches outlined in the previous memo to modify height and articulation elements. They included altering the height limit, distinguishing between new and existing structures when applying requirements, increasing options to meet the articulation requirement, clarifying that the regulations only apply to residential structures, and allowing for more dialogue and interpretation based on intent. All are explored below. Both the district councils and DSI staff expressed significant reservation with making the requirements more open to interpretation due to the potential for lack of consistency in their application. An option requiring some interpretation for articulation is presented for consideration, but not recommended.

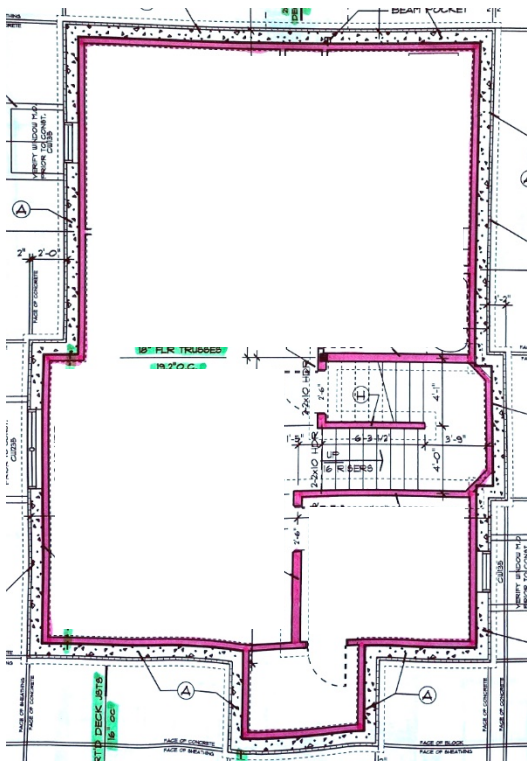
Recommended change to both height and articulation:

**Restrict applicability of height and articulation requirements to new residential construction and additions of a certain size.**

Discussion: A recurring issue is a need for a variance due to the restrictions on a project as a result of the reuse of part of an existing building. For most projects requiring a variance to height and/or articulation, there has been general support for the reuse of existing foundations and first floors because it minimizes change to the footprint of the building, cost, and environmental impact. It was considered to restrict applicability of the standards to only new construction, but that would allow vertical and horizontal additions to go unchecked. Therefore, the recommendation is to require adherence to the standards for additions that increase the square footage by more than 50% of existing house footprint area. This would mean that additions of a room or two would be subject to the base standards in 66.231. By using the footprint area as the basis of calculation, it simplifies questions that may arise around finished basements or half-stories. Also, because other uses are allowed in R1-R4 zoning districts, the specification of “residential” was added to clarify that these regulations would not apply to uses such as day cares or schools.

[Examples on following page]

Examples: 1737 James (on the left) is an example of a foundation poured new, allowing for articulation to be integrated into the design. A variance for sidewall articulation was requested for 1946 Wellesley (right). The application was to extend the existing 27' wall pictured to an overall length of 50'. The district council recommended denial and the BZA denied the application for an articulation variance as originally proposed. This is an example of a project that the district councils would likely want to discuss. It would still require articulation (and a variance) with the recommended changes.



Height-specific change:

**Increase the R4 height limit of 22' at the setback line to be the same as in R3 at 24'.**

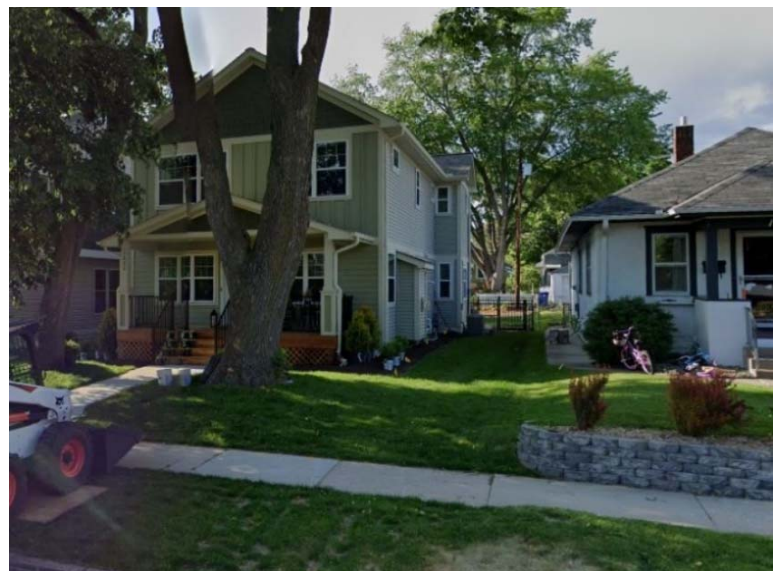
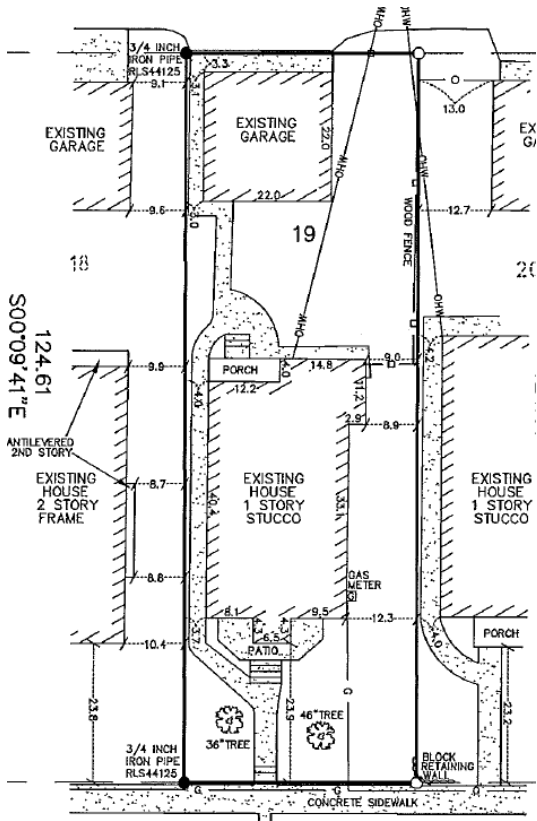
Discussion: The main factors that contribute to the height of a house are height of the foundation wall above grade, floor to ceiling height, truss/joist system height, and roof height/pitch. Each of these have reasonable minimums based on building code, design, and comfort. When added together and considered in the context of smaller side yard setbacks and lower height limits in the R4 zoning district, it is often difficult to meet the 22' height limit. One of the things that can be adjusted is the roof pitch, but that often leads to a design that is inconsistent with the roof pitches found throughout Saint Paul's housing stock.

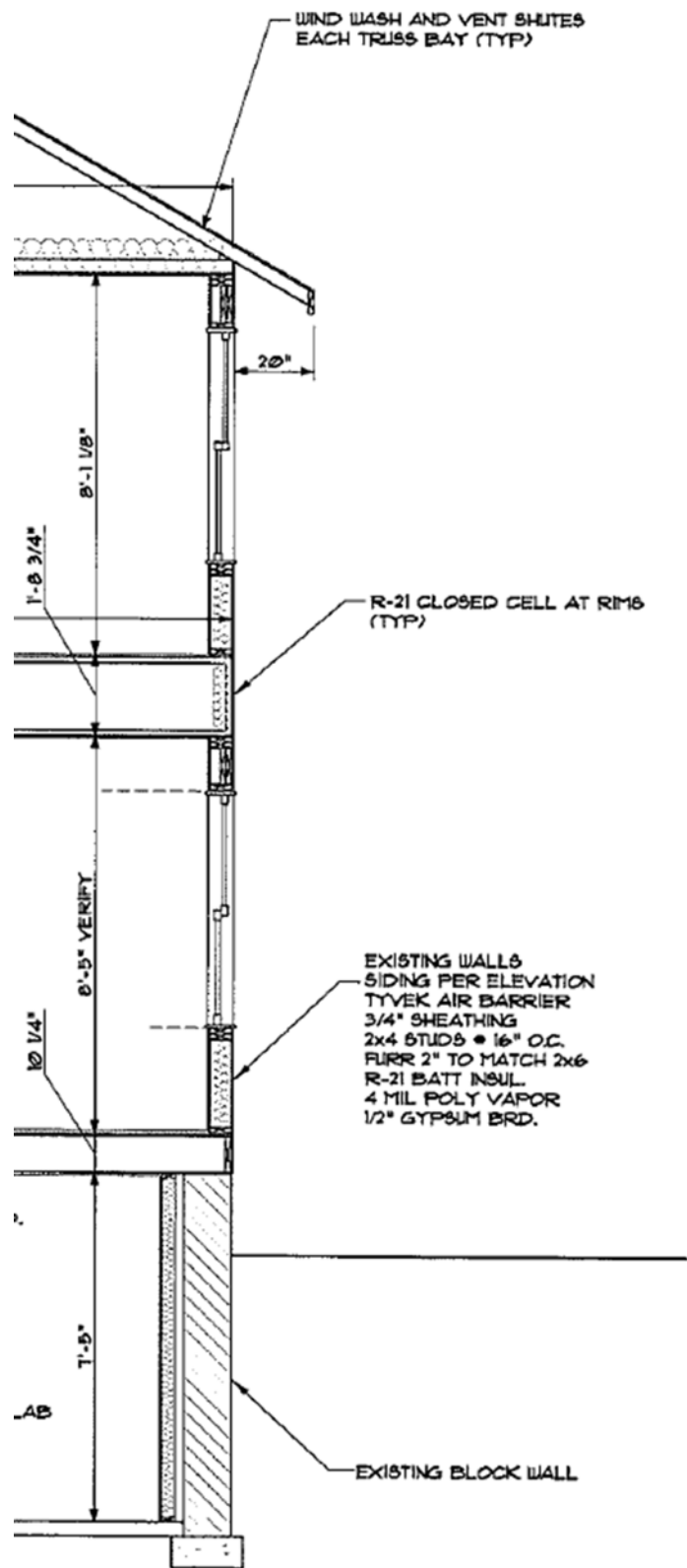
This change would not be any more difficult to integrate into city review processes.

Finally, assuming the application of the standards would be restricted to residential uses, another recommendation is to change the maximum height with sufficient setbacks to be that of the zoning district (30') rather than 35'. The additional height was originally considered for non-residential uses such as schools or libraries that usually had large setbacks. These uses would be subject to the base zoning district dimensional standards.

[Example on following pages]

Example: 1325 Hartford is an example for considering an increase of allowed height in R4. The application was to expand from a 1 ½ story house to a full two stories and one of the variances needed was for height. The original home was built with at 3.7' side yard setback on one side and so was fixed to need to meet the 22' building height. The cross section shows the breakdown of elements that contribute to height. 16' 7" for combined floor to ceiling height is fairly standard and seems reasonable, as does a combined 2' 7" for the truss and joist systems. With a 24' limit, this would allow 4' 10" total for both foundation wall height and the roof (measured as described in Sec. 60.203), which does not seem excessive and is still a significant reduction of height at the side setback lines as compared to the base maximum.







Articulation-specific changes:

- **Reduce the minimum dimensions to be at least 1' x 6' x one story tall, starting at the first-floor elevation and give an alternative option to meet the requirement with a more general description, but subject to approval of the Zoning Administrator ("Option 1");**

AND/OR

- **Exempt all projects that maintain the same footprint from the sidewall articulation requirement ("Option 2").**

Discussion: The solution to the articulation issue remains unclear and will benefit from public input and consideration of the Planning Commission. While the recommendation to restrict application to new construction and additions will reduce the number of projects that will require articulation, the definition still needs refinement. The neighborhoods have been clear that it should not be removed completely, yet there are issues. These include a requirement for the projection to extend from grade to eave, which can result in odd connections to the ground and addition of small roof-like projections midway up a wall. Also, there are other elements that often meet the same intent as articulation, such as chimneys and bay windows, yet they do not fulfill the requirement.

Two options are proposed for consideration and are not mutually exclusive. Option 1 changes the physical dimensions of what constitutes articulation. Changing this language eliminates the need for extensions to the ground that may not make sense from a structural or design standpoint. It also allows smaller projections to count towards the requirement. It also gives a clear description of what DSI staff will need to look for in an application. However, it has been difficult to anticipate every issue with every project, and specificity this kind of requirement could lead to similar issues as we have now (though likely fewer). Because of this, an alternative is included in the note that generalizes what constitutes articulation and establishes necessary approval by the Zoning Administrator to ensure consistency. If this option moves forward, it would be sensible to develop guidelines for applicants and DSI staff to use. Both the neighborhood and DSI staff had significant reservations about this option due to its inherent subjectivity. It is included here because there is merit to some flexibility and an idea may emerge through the review process that will assuage concern. Option 2 exempts projects from the sidewall articulation requirement if the project maintains the same footprint as the existing building. This addresses challenges posed by working with part of an existing building and the idea of maintaining the footprint has been generally supported by neighbors and district councils. It would also reduce the pressure to figure out a way to articulate a wall on a second story addition, which often happens by adding a bumpout on the second floor.

The recommendation is to combine these options pending further comment and discussion. With the footprint exemption and a dimensioned option, interpretation and consistency issues that are a concern for residents and DSI staff would be reduced, but not eliminated. With any of these options, a project would still have to adhere to the reduced height requirement.

Example: The owners of 1568 Osceola applied for height and articulation variances. Because they maintained the first floor walls, adding articulation was difficult. In order to attempt to meet the intent of the articulation standard, the owner and architect added some articulation to the second floor in the form of a window bumpout.



**Recommendations**

The recommendation is for the Committee to forward this memo and draft text amendments to the Planning Commission with a recommendation to release for review and set a date for a public hearing of April 3, 2020.

**Attachments**

Attachment A: List of Articulation and/or Height Variance Requests in Districts 14 and 15  
Attachment B: Draft Text Amendment Language

cc: Zoning Administrator  
Ward 3 Office  
Ward 4 Office  
District 14  
District 15

Attachment A

List of Articulation and/or Height Variance Requests in Districts 14 & 15

**Attachment A: List of Articulation and/or Height Variance Requests in Districts 14 and 15**

Year	File/Permit #	Address	Planning District	Request		Staff Recommendation	DC Recommendation	BZA Decision
				Articulation	Height			
2015	15-172295	1568 OSCEOLA	14	1	1	Articulation: Denial Height: Denial	Approval	Approved
2015	15-181025	1443 JEFFERSON	14	1	1	Articulation: Denial Height: Denial Setback: Denial	Approval	W Articulation: Approved E Articulation: Denied Height: Denied W Setback: Approved
2015	15-186539	1369 SARGENT	14		1	Height: Denial Setback: Approval	None	Approved
2015	15-186551	2208 GOODRICH	14	1		Articulation: Denial Setback: Approval	None	Approved
2015	15-187773	1485 SARGENT	14		1	Height: Denial Setback: Approval	None	Approved
2015	15-158127	26 HILLTOP	15	1		Articulation: Denial Setback: Approval	None	Approved
2015	15-167940	1311 ELEANOR	15	1	1	Articulation: Denial Height: Denial F. Setback: Denial S. Setback: Denial	Approval	Approved
2015	15-177987	1634 BAYARD	15	1		Articulation: Denial	Approval	Approved
2015	15-186254	1696 JUNO	15		1	Height: Denial Setbacks: Approval	None	Approved
2016	16-030407	1296 PALACE	14	1		Articulation: Denial Setback: Approval	None	Approved
2016	16 - 047746	132 WHEELER	14	1		Articulation: Approval	Approval	Approved
2016	16 - 066991	1389 LINCOLN	14	1		Articulation: Approval	Approval	Approved
2016	16 - 100815	1396 GRAND	14	1		Articulation: Approval	Approval	Approved
2016	16 - 077359	1677 JUNO	15	1		Articulation: Denial Setback: Approval	Approval	Approved
2017	17 - 054115	1372 LINCOLN	14	1		Height: Approval Setback: Approval	Approval	Approved
2017	17 - 068815	1315 JULIET	14		1	Height: Approval Setback: Approval	Approval	Approved
2017	17 - 015105	1325 HARTFORD	15	1	1	Articulation: Denial Height: Denial Setback: Denial	Approval	Approved
2017	17 - 074446	1392 BAYARD	15		1	Height: Denial Setback: Denial	Approval	Approved
2018	18 - 018308	1790 HAMPSHIRE	15		1	Height: Approval Setback: Approval	None	Approved
2018	18 - 034785	299 WARWICK	14		1	Height: Approval Setback: Approval	Approval	Approved
2018	18 - 035200	1295 WELLESLEY	14	1	1	Articulation: Approval Height: Approval Setback: Approval	Approval	Approved

**Attachment A: List of Articulation and/or Height Variance Requests in Districts 14 and 15**

2018	18 - 045329	1499 GOODRICH	14	1		Articulation: Approval	Approval	Approved
2018	18 - 057875	210 CLEVELAND	14		0	Height: Approval	None	Application Withdrawn
2018	18 - 087169	1288 JUNO	15	1	1	Articulation: Approval Height: Approval	Approval	Approved
2018	18 - 096536	1947 FAIRMONT	14	1		Articulation: Approval	None	Approved
2018	18 - 110423	1281 PALACE	14	1		Articulation: Approval	None	Approved
2018	18 - 123560	1629 HARTFORD	15		1	Height: Approval Setback: Approval	None	Approved
2018	18 - 126229	1400 BAYARD	15		1	Height: Approval	Approval	Approved
2018	18 - 126266	2040 ITASCA	15	1		Height: Approval Setback: Approval	Approval	Approved
2019	19 - 008579	1493 HIGHLAND	15	1		Articulation: Approval Setback: Approval	Approval	Approved
2019	19-011095	1379 ELEANOR	15	1		Articulation: Approval Setback: Approval	Approval	Approved
2019	19 - 012894	2241 PRINCETON	14	1		Articulation: Approval	Approval	Approved
2019	19 - 016684	405 SARATOGA	14		1	Height: Approval Setback: Approval	None	Approved
2019	19 - 036463	1681 PINEHURST	15	1		Articulation: Approval	None	Approved
2019	19 - 045290	1938 BEECHWOOD	15		1	Height: Approval	None	Approved
2019	19 - 045387	1767 ELEANOR	15	1		Articulation: Approval	Approval	Approved
2019	19 - 056497	1895 YORKSHIRE	15	1		Articulation: Approval	None	Approved
2019	19 - 075934	1946 WELLESLEY	14	1	1	Articulation: Denial Height: Denial Setback: Denial	Articulation: Denial Height: Approval Setback: Approval	Articulation: Denied Height: Denied Setback: Approved
2019	19 - 075972	446 SARATOGA	14	1		Articulation: Approval	None	Approved
			<b>TOTAL</b>	<b>27</b>	<b>18</b>			

**Attachment B**

**Draft Language for Districts 14 & 15 Residential Standards**

Attachment B: Draft Language for Districts 14 & 15 Residential Standards

Sec. 66.231. - Density and dimensional standards table.

Table 66.231, residential district dimensional standards, sets forth density and dimensional standards that are specific to residential districts. These standards are in addition to the provisions of chapter 63, regulations of general applicability.

Table 66.231. Residential District Dimensional Standards

Zoning District	Lot Size Minimum (per unit)		Height Maximum		Yard Setbacks Minimum (feet)		
	Area (sq. ft.)(b)	Width (feet)	Stories	Feet	Front	Side	Rear
R1 one-family	9,600 (e)	80	3	30 (l)	30 (g)	10	25
R2 one-family	7,200	60	3	30 (l)	25 (g)	8 (h)	25
R3 one-family	6,000	50	3	30 (l)	25 (g)	6 (h)	25
R4 one-family	5,000	40	3	30 (l)	25 (g)	4 (h)	25

Notes to table 66.231, residential district dimensional standards:

(a)...(k)...

(l) In planning districts 14 and 15, For new residential construction and additions that increase the floor area by more than 50% of the existing building footprint R1—R4 residential districts in planning districts 14 and 15, excluding property with local heritage preservation site or district designation, shall have the following maximum building heights shall apply at side setback lines: 28 feet in R1, 26 feet in R2, 24 feet in R3, and 22 feet in and R4. One (1) foot shall be added to the maximum building height per each one (1) foot the portion of the building is set back from the nearest side setback line, to a the maximum height of thirty five (35) feet allowed in the district. Building height for flat roofs shall be measured to the highest point of the parapet, if present. Properties with local heritage preservation site or district designation are excluded from the requirements of this note.

Sec. 66.234. - Sidewall articulation.

For In R1—R4 residential districts in planning districts 14 and 15, excluding property with local heritage preservation site or district designation, sidewall articulation is required for building faces that exceed thirty-five (35) feet in length for new residential construction and additions that increase the floor area by more than 50% of the existing building footprint. Articulation shall be in the form of a structural projection of at least one (1) foot in depth and six (6) feet in length, and must extend from grade to the eave at least one story tall starting at or below the first floor elevation. Alternatively, the requirement can be met by a significant wall projection, depression, or roofline variation, subject to approval by the zoning administrator. New construction and additions that maintain the same footprint and property with local heritage preservation site or district designation are exempt from this requirement.