## CONSENT AGENDA ITEM

If no one asks to speak about this case prior to the hearing, it will be approved without discussion as part of the Consent Agenda.

| Issue: (A) Initiation of a Text Amendment; and (B) Public Hearing and Consideration of a Text Amendment to the Zoning Ordinance to amend sections 7-202 and 2-145 regarding small accessory buildings in required yards and floor area ratio. | Planning Commission Hearing: | March 6, 2018 |
| :---: | :---: | :---: |
|  | City Council Hearing: | March 17, 2018 |

Staff: Mary Christesen, Acting Land Use Services Chief, mary.christesen@alexandriava.gov Shaun Smith, Acting Zoning Manager, shaun.smith@alexandriava.gov
Anh Vu, Acting Supervisory Program Analyst, anh.vu@alexandriava.gov

## I. Issue

The purpose of this proposed zoning text amendment is two-fold:
Modify and amend the provision for sheds and other small accessory buildings permitted in required yards. The current standards of section 7-202(B)(4) allow specific accessory buildings and structures to be located in required side and rear yards with no setback requirements other than a requirement that the structure not obstruct light and ventilation. The recommended changes are intended to update the existing regulations to better align with functional sizes and heights for these types of structures on residentially zoned properties. Furthermore, these recommended changes will align the method of measurement for the height of accessory buildings to match the measurement for height of buildings as defined in section 2-154.

Modify and amend section 2-145 to allow floor area sheds and other small accessory buildings to be excluded from FAR if they meet certain requirements.

## II. Background

Planning Commission and members of the public expressed concerns regarding the current standards regulating the size and heights of accessory structures set forth in section 7202(B)(4). Planning Commission suggested that staff consider revising the provisions for sheds and other small accessory buildings to better reflect current market and industry trends regarding their size and heights. In response to the expressed concerns, staff reviewed and analyzed the current standards for sheds and other small accessory buildings regarding appropriate size, height, and their placement and visual impacts.

Accessory buildings are detached structures subordinate to the principal building and located on the same lot or site as the principal building. Typical accessory buildings may include, are not limited to, detached garages, sheds, playhouses, greenhouses, cabanas, gazebos, and other similar structures. The subject of this text amendment are small accessory structures that can be located in required side and/or rear yards and are eligible for exclusion from floor area. Larger accessory structures may be located on residential properties, but must comply with all required setbacks and are counted towards floor area.

The current standards as outlined within section 7-202(B)(4) regulate the height, square footage and location of sheds and other small accessory structures that may be located in required side and rear yards. For property zoned and used for semi-detached or townhouse dwellings, section 7-202(B)(4)(b), requires the small accessory structures to be located at the rear property line creating a difficulty for corner lots, that have two front yards and two side yards, but no rear property line or for properties that may have parking, or another obstruction located at the rear property line.

The 2008 infill regulations incorporated several exclusions for certain types of construction for the development of single and two-family dwellings. While the approved regulations allowed for exclusions of detached garages, an exclusion for sheds (a substantially smaller
type of accessory building) was not incorporated with these regulations. Sheds are included toward a property's gross floor area. This has often resulted in residents demolishing these accessory buildings on their lots in order to gain modest area for small additions to their homes.

## III. Discussion of Proposed Text Changes

The proposed text amendments to Section 7-202 of the Zoning Ordinance modify and add language regarding size and height requirements. The proposed text amendment is intended to adjust the requirements to match more closely with accessory buildings which are readily available for purchase on the commercial market and meet today's storage needs for a typical resident. Allowing a slightly larger accessory building to be located in a require side or rear yard behind the main dwelling and excluded from floor area will incentivize property owners to locate these types of structures in the back corners of their properties to house and organize equipment or other items meant for yard maintenance. Single-family dwellings in the CL zone would benefit from the proposed change. These text changes would establish specific size requirements for sheds or other small accessory buildings located on single-family and two-family dwelling lots. The proposed text amendment is also intended to align the height measurement convention for the accessory buildings to match that of other buildings for better standardization (Table 1).

In addition, staff proposes to create an exclusion for sheds and other small accessory buildings to facilitate their placement on lots in accordance with infill standards. This exclusion shall be based on the minimum development standards as outlined within section 7-202(B)(4).


Text Amendment \#2018-0003 Sheds and Other Small Accessory Buildings

Table 1: Section 7-202(B)(4) Proposed Requirements:

| Existing Requirements | Proposed Requirements | Existing Size* | Proposed Size* | Existing <br> Height* | Proposed <br> Height** | Existing <br> Location | Proposed <br> Location |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| $\begin{aligned} & \text { Zone R-20, } \\ & \text { R-12, R-8, R- } \\ & 5 \text { or R-2-5 } \\ & \text { and used for } \\ & \text { single-family } \\ & \text { dwellings } \end{aligned}$ | Single and two-family dwellings, outside of historic district | $\begin{aligned} & 80 \mathrm{sq} . \\ & \mathrm{ft} . \end{aligned}$ | $\begin{gathered} 100 \mathrm{sq} . \\ \mathrm{ft} . \end{gathered}$ | 8.00 ft . | 10.00 ft . | Any yard except a front yard | Any yard except a front yard (no change) |
| Zoned and used for semidetached or townhouse dwellings | Townhouse dwellings or for single and two-family dwellings located within a historic district | $\begin{aligned} & 50 \text { sq. } \\ & \text { ft. } \end{aligned}$ | 65 sq. ft. | 7.00 ft . | 8.00 ft . | Rear yard at the rear property line | Any yard except a front yard |

* Maximum aggregate floor area
* Height measured at the structure's highest point.
** Measurement for height of buildings as defined in section 2-154
Small accessory buildings come in variety of sizes. The actual dimensions of factory-made ready-to-assemble structures are defined solely by the manufacturer at its own discretion based on storage type and purpose. Staff looked at 14 major brands of sheds and small buildings manufactures. The data sampled 180 accessory building sizes from the top major brands. The average size was used to represent the size of structures not located in a historic district. The distribution consisted of structures ranging from small ( 2 x 2 ft .) to large ( 10 x 10 ft . and up). The median was used to represent the size of structures located in a historic structure since it best captured the middle value of all structure sizes.

For lots developed with single and two-family dwellings, not located in a historic district, such structures may not exceed 100 square feet in floor area in the aggregate and a building height no greater than ten feet when measured from average existing grade or average finished grade, whichever is lower. This is an increase from 80 square feet in floor area and an increase from eight feet in height (Table 1). The proposed 20 percent increase is based off the average of common accessory building sizes.

For lots developed with townhouse dwellings or for properties located within a historic district, such structures may not exceed 65 square feet of floor area in the aggregate and a building height no greater than eight feet. This is an increase from 50 square feet in floor area and an increase from seven feet in height. In addition, the requirement for the structure to be located at the rear property line was removed. The proposed 30 percent increase is based off the median of common accessory building sizes.

Additionally, the amended text removes language specifying that the height be measured at the highest point, thus leaving the height to be measured at the more common convention, the mid-point of the roof slope.

## IV. Recommendation

The proposed text amendments increase the allowed size and height for sheds and other small accessory buildings in required yards, aligns the convention for measuring the height of the structure to be the same as that of other building types and allows small accessory structures as an exclusion from floor area. Additionally, the proposed text amendments will allow these regulations to be applied to all single, two-family and townhouse properties and removes the restriction that all small accessory structures must be located at the rear property line for two-family and townhouse properties allowing property owners the flexibility to locate the small accessory structure in the most appropriate location on the property.

Staff recommends approval of the change to the Zoning Ordinance as proposed in Attachment \#1.

Staff:
Mary Christesen, Acting Land Use Services Division Chief, mary.christesen@alexandriava.gov
Shaun Smith, Acting Zoning Manager, shaun.smith@alexandriava.gov
Anh Vu, Acting Supervisory Program Analyst, anh.vu@alexandriava.gov

Attachments: 1. Proposed Zoning Text Changes
2. Data (180 accessory buildings)

## Attachment \#1

PROPOSED ZONING TEXT CHANGES

Proposed Zoning Ordinance Changes - The following text will modify or replace text in section 7-202 and 2-145.

Note: New text is underlined
Deleted text is shown with a strikethrough

* Text Amendment \#2017-0001 approved by Planning Commission on February 6, 2018 and being presented to City Council on February 24, 2018; implementation ordinance being presented to City Council on March 6, 2018 and March 17, 2018.


## 2-145 Floor area.

A. For residential dwellings in the $R-20, R-12, R-8, R-5, R-2-5$, and single-family and two-family dwellings in the RA and RB zones (not including property located within the Old and Historic Alexandria and Parker-Gray Districts), the floor area of the building or buildings on a lot or tract or tract of land (whether "main" or "accessory") is the sum of all gross horizontal areas under roof on a lot. It shall include all space which is deemed habitable space by the Virginia Uniform Statewide Building Code (USBC) or seven feet or more in height, whichever is less. These areas shall be measured from exterior faces of walls or any extended area under roof and are to be measured from the shared lot line in the case of party walls. Floor area with a ceiling height 15 feet or greater shall be counted twice. Floor area with a ceiling height 25 feet or greater shall be counted three times. This space shall be based on permanent construction whether or not provided with a finished floor or ceiling. Excluded from floor area shall be:*
(1) Stairs, and elevators. The term stairs includes ramps and other similar structures deemed necessary to provide access to persons with disabilities. *
(2) Floor space used for utilities, which may include accessory water tanks, cooling towers, mechanical and electrical equipment, and any similar construction not susceptible to storage or occupancy (but not including ductwork, pipes, radiators or vents). *
(3) Basements.
(4) Attic floor area with a ceiling height of 7 feet or less and where the space with the ceiling height of 7 feet or more is less than 4 feet wide, as measured from the attic floor or floor joists if there is no floor, to the bottom of the roof rafters. *
(5) Open front porches and porticos in accordance with section 7-2504.
(6) Free-standing garages to the rear of the main building in accordance with section 7-2505.
(7) Architectural features up to a maximum projection of 30 inches extending beyond an exterior face of a building wall or column. *
(8) Space under open balconies (decks) and similar structures projecting from the first floor or below. *
(9) Space under open balconies and similar structures projecting from a floor above the first floor up to a maximum depth of 8 feet. *
(10) Retractable awnings not enclosed by a wall, pole, or fence on three sides and that do not use poles or posts for structural support. *
(11) Sheds and other small accessory buildings in accordance with section 7202(B)(4).

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B. For properties except for those specified in subsection A. above, the floor area of the building or buildings (whether "main" or "accessory") on a lot or tract or tract of land is the sum of all gross horizontal areas under a roof on a lot. These areas shall be measured from the exterior faces of walls or any extended area under roof and are to be measured from the shared lot line in the case of party walls. It shall include all space which is deemed habitable space by the Virginia Uniform Statewide Building Code (USBC) or seven feet or more in height, whichever is less. It shall include all space within an above grade parking garage. This space shall be based on permanent construction whether or not provided with a finished floor or ceiling. Excluded from floor area shall be: *
(1) Stairs and elevators. The term stairs includes ramps and other similar structures deemed necessary to provide access to persons with disabilities. *
(2) Floor space used for utilities, which may include accessory water tanks, cooling towers, mechanical and electrical equipment, and any similar construction not susceptible to storage or occupancy (but not including ductwork, pipes, radiators or vents). *
(3) Lavatories of which only a maximum of 50 square feet of each lavatory can be excluded. The maximum total of excludable area for lavatories shall be no greater than of $10 \%$ of gross floor area. *
(4) Basements (except shall be included for purposes of calculating the offstreet parking requirements pursuant to Article VIII). *
(5) Architectural features up to a maximum projection of 30 inches extending beyond an exterior face of a building wall or column. *
(6) Space under open balconies (decks) and similar structures projecting from the first floor or below. *
(7) Space under open balconies and similar structures projecting from a floor above the first floor up to a maximum of depth of 8 feet. *
(8) Retractable awnings not enclosed by a wall, pole, or fence on three sides and that do not use poles or posts for structural support. *
(9) Loading spaces of which only a maximum of 850 square feet for each required loading space per section $8-200(B)(2)$ can be excluded. *
(10) Any floor area that was used as a private or public garage prior to [date of adoption] that had a headroom less than 7 feet 6 inches. *
(11) Floor areas excluded as part of a development site plan that were approved prior to [date of adoption] within a Coordinated Development District. *
(11) Sheds and other small accessory buildings in accordance with section 7202(B)(4).
* Text Amendment \#2017-0001 approved by Planning Commission on February 6, 2018 and being presented to City Council on February 24, 2018; implementation ordinance being presented to City Council on March 6, 2018 and March 17, 2018.


## 7-202 - Permitted obstructions.

The following obstructions shall be permitted when located in a required yard and placed so as not to obstruct light and ventilation and when otherwise permitted by law:
(A) In all yards:
(1) Open fences which do not exceed three and one-half feet in height.
(2) Awnings or canopies provided they do not project more than five feet in depth from the existing building face.
(3) Bay or display windows, projecting 20 inches or less into the yard and gutters, eaves, cornices, window sills, and roof overhangs projecting 30 inches or less into the yard. *
(4) Chimneys projecting 30 inches or less into the yard, provided that such projection does not reduce the width of the remaining side or rear yard to less than five feet.
(5) Arbors and trellises. If a wall on a dwelling on an adjacent lot has any windows or doorways that have a sill lower than eight feet, measured from grade, facing the shared property line and located within three feet of that shared property line, the new arbor or trellis' setback shall be five feet from that shared lot line. This setback from that shared lot line is required at the location of the affected window(s) or doorway(s) and is required to extend along the width of those window(s) or doorway(s) and shall extend for a minimum of five feet in each direction from that window or doorway.
(6) Flag poles which do not exceed 15 feet in height.
(7) Open stairs, provided that the stairs do not reduce a side or rear yard to less than five feet.
(8) Ramps and similar structures necessary to provide access for the handicapped.
(9) Porticos, provided that they do not extend more than six feet from the main building wall, do not extend more than nine feet in length, which dimensions include any roof overhang, and provided further that they remain open.
(B) In any yard except a front yard:
(1) Sandboxes, swings and other small items of children's play equipment.
(2) Clotheslines.
(3) Open and closed fences which do not exceed six feet in height. If a wall on a dwelling on an adjacent lot has any windows or doorways that have a sill lower than six feet, measured from grade, facing the shared property line and located within three feet of that shared property line, the new fence shall not exceed three and a half feet in height along the width of those window(s) or doorway(s). If the fence has a setback of five feet or more from that shared lot line, it is permitted to be taller than three and a half feet but shall not exceed six feet in height. This setback from that shared lot line is required at the location of the affected window(s) or doorway(s) and is required to

Text Amendment \#2018-0003 Sheds and Other Small Accessory Buildings extend along the width of those window(s) or doorway(s) and shall extend for a minimum of five feet in each direction from that window or doorway.
(4) Sheds and other small accessory buildings Small sheds, doghouses, dollhouses and structures used for storage, provided:
(a) For lots developed with On land zoned $R-20, R-12, R-8, R-5$ or R-2-5 and used for_single-family single and two-family dwellings, not located in a historic district, such structures may not exceed $80 \underline{100}$ square feet in floor area in the aggregate and eight feet in-may have a building height no greater than 10 feetheight when measured at the structure's highest point.
(b) For lots developed with-On land zoned and used for semidetached or townhouse dwellings or single or two-family dwellings located within a historic district, such structures may only be placed in the rear yard at the rear property line, may not exceed $50 \underline{65}$ square feet of floor area in the aggregate and may have a building height no greater than eight feet seven feet in height when measured at the structure's highest point.
(c) If a wall of a dwelling on an adjacent lot has any windows or doorways that have a sill lower than eight feet, measured from grade, facing the shared property line and located within three feet of that shared property line, the new small shed or structure used for storage's setback shall be five feet, including any roof overhang, from that shared lot line. This setback from that shared lot line is required at the location of the affected window(s) or doorway(s) and is required to extend along the width of those window(s) or doorway(s) and shall extend for a minimum of five feet in each direction from that window or doorway.
(5) Freestanding air conditioning machinery, provided it can be demonstrated to the director that it will not exceed a noise level of 55 decibels ( $55 \mathrm{~dB}(\mathrm{~A})$ ) when measured at any property line of the lot, and provided it is placed in a location which has the least adverse impacts to adjoining lots of those locations available.
(6) Open terraces and decks not over two feet above the average level of the adjoining ground and two feet above ground at any property line of the lot but not including a roofed-over terrace or porch.
(7) Free-standing private garages to the rear of the main building in accordance with section 7-2505.
(C) In the Old and Historic Alexandria and the Parker-Gray Districts, the requirement of sections 7-202(A)(1) and 7-202(B)(3) may be waived or modified by the board of architectural review where the board finds that a proposed fence would be architecturally appropriate and consistent with the character of the district.
(D) In any residential zone a ground level covered open front porch is permitted to project a maximum of eight feet from the front building wall into the required front yard, or primary front yard if a corner lot, of a single-family, semi-detached, duplex or townhouse dwelling; provided that a special exception under section 11-1302 of this ordinance is approved.

* Text Amendment \#2017-0001 approved by Planning Commission on February 6, 2018 and being presented to City Council on February 24, 2018; implementation ordinance being presented to City Council on March 6, 2018 and March 17, 2018.


## Attachment \#2

DATA (180 ACCESSORY BUILDINGS)

| Manufacturer | Size | Square Feet |
| :---: | :---: | :---: |
| Rubbermaid | 2x2 | 4 |
|  | 2x4 | 8 |
|  | 2x4.5 | 9 |
|  | 2x5 | 10 |
|  | 3x7 | 21 |
|  | 4x5 | 20 |
|  | 4x4.5 | 18 |
|  | $4.5 \times 6$ | 27 |
|  | 5x6 | 30 |
|  | 6x6 | 36 |
|  | 7x7 | 49 |
|  | 7x10 | 70 |
|  | 7x11 | 77 |
| DuraMax Building | 2x5 | 10 |
|  | 4x6 | 24 |
|  | 4x8 | 32 |
|  | 5x5 | 25 |
|  | 5x8 | 40 |
|  | 5x10 | 50 |
|  | 6x6 | 36 |
|  | 6x8 | 48 |
|  | 7x7 | 49 |
|  | $8 \times 8$ | 64 |
|  | $8 \times 10$ | 80 |
|  | $10 \times 10$ | 100 |
|  | 10x13 | 130 |
|  | 10x15 | 150 |
|  | 10x18 | 180 |
|  | 10x20 | 200 |
| Suncast Tremont Gable | 2x2 | 4 |
|  | 4x7 | 28 |
|  | 7x7 | 49 |
|  | 7x8 | 56 |
|  | $8 \times 10$ | 80 |
|  | $8 \times 13$ | 104 |
|  | $8 \times 16$ | 128 |
| Suncast Covington | 2x2 | 4 |
|  | 2x3 | 6 |

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| Manufacturer | Size | Square Feet |
| :---: | :---: | :---: |
|  | 2x6 | 12 |
|  | $3 \times 5$ | 15 |
|  | $3 \times 7$ | 21 |
|  | $4 \times 4$ | 16 |
|  | $4 \times 6$ | 24 |
|  | $4 \times 7$ | 28 |
|  | $4 \times 8$ | 32 |
|  | $5 \times 6$ | 30 |
|  | 6x8 | 48 |
|  | $7 \times 7$ | 49 |
|  | 7x8 | 56 |
|  | 7x10 | 70 |
|  | $8 \times 10$ | 80 |
|  | $8 \times 13$ | 104 |
| Lifetime Products | $2.5 \times 8$ | 20 |
|  | $3 \times 8$ | 24 |
|  | $4.5 \times 7$ | 32 |
|  | $5 \times 8$ | 40 |
|  | $6.5 \times 8$ | 52 |
|  | $7 \times 7$ | 49 |
|  | $8 \times 8$ | 64 |
|  | $8 \times 10$ | 80 |
|  | $8 \times 12.5$ | 100 |
|  | $8 \times 15$ | 120 |
|  | $8 \times 17.5$ | 140 |
|  | $8 \times 20$ | 160 |
|  | 11x11 | 121 |
|  | $11 \times 13.5$ | 149 |
|  | 11x14 | 154 |
|  | $11 \times 18.5$ | 204 |
|  | 11x21 | 231 |
| Duramax Building Products | $3 \times 10.5$ | 32 |
|  | 4x6 | 24 |
|  | 4x8 | 32 |
|  | 5x5 | 25 |
|  | 5.25x8 | 42 |
|  | $5 \times 10.5$ | 53 |
|  | 6x6 | 36 |
|  | 6x8 | 48 |
|  | 7x7 | 49 |

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| Manufacturer | Size | Square Feet |
| :---: | :---: | :---: |
|  | $8 \times 8$ | 64 |
|  | $8 \times 10.5$ | 84 |
|  | $10 \times 10$ | 100 |
|  | $10.5 \times 10.5$ | 110 |
|  | $10.5 \times 13$ | 137 |
|  | 10x13 | 130 |
|  | $10.5 \times 15.5$ | 163 |
|  | $10 \times 18$ | 180 |
|  | 10x21 | 210 |
|  | $10 \times 23.5$ | 235 |
| Keter | $2.5 \times 4.5$ | 11 |
|  | $2.5 \times 4.75$ | 12 |
|  | $3 \times 6$ | 18 |
|  | 4x6 | 24 |
|  | $4 \times 7.5$ | 30 |
|  | 6x8 | 48 |
|  | $7 \times 7.5$ | 53 |
|  | 7.5x9 | 68 |
|  | $7.5 \times 11$ | 83 |
| Arrow | 2x7 | 14 |
|  | $3 \times 4$ | 12 |
|  | 4x6 | 24 |
|  | 4x7 | 28 |
|  | 4x8 | 32 |
|  | 4x10 | 40 |
|  | $5 \times 6$ | 30 |
|  | 6x8 | 48 |
|  | 6x10 | 60 |
|  | $7 \times 8$ | 56 |
|  | 7x10 | 70 |
|  | $8 \times 8$ | 64 |
|  | $8 \times 10$ | 80 |
|  | 9x10 | 90 |
|  | 10x10 | 100 |
|  | 10x12 | 120 |
|  | 10x14 | 140 |
|  | 10x15 | 150 |
|  | 10x20 | 200 |
|  | 10x25 | 250 |
|  | 10x30 | 300 |

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| Manufacturer | Size | Square Feet |
| :---: | :---: | :---: |
|  | 12x17 | 204 |
|  | 12x24 | 288 |
|  | 12x31 | 372 |
|  | 14x21 | 294 |
|  | 14x31 | 434 |
| Heartland | 4×8 | 32 |
|  | 8X8 | 64 |
|  | $8 \times 10$ | 80 |
|  | $8 \times 12$ | 96 |
|  | 10x10 | 100 |
|  | 10x12 | 120 |
|  | 10x16 | 160 |
|  | 12x12 | 144 |
|  | 12x16 | 192 |
|  | 12x20 | 240 |
|  | 12x24 | 288 |
| Best Barns | $8 \times 12$ | 96 |
|  | 10x10 | 100 |
|  | 10x12 | 120 |
|  | 10x14 | 140 |
|  | 10x16 | 160 |
|  | 12×12 | 144 |
|  | 12x16 | 192 |
|  | 12×20 | 240 |
|  | 12x24 | 288 |
|  | 16x20 | 320 |
|  | 16x24 | 384 |
|  | 16x28 | 448 |
|  | 16x32 | 512 |
| Cedarshed | 2x4 | 8 |
|  | 3X6 | 18 |
|  | $3 \times 8$ | 24 |
|  | $4 \times 4$ | 16 |
|  | 4X8 | 32 |
|  | $4 \times 12$ | 48 |
|  | $6 \times 6$ | 36 |
|  | 6x9 | 54 |
|  | 6x10 | 60 |
|  | 6x12 | 72 |
|  | $8 \times 8$ | 64 |

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