

# City of Clayton Land Use Code

## Planning and Development Services Staff Clarification SC18-02

Date: December 14, 2018

Subject: **Impervious Coverage**

Code Sections: Definitions – impervious coverage and impervious material; Article III, Section 405.390  
Residential Zoning Districts; multiple sections  
Urban Design Districts; multiple sections

Initiated by: Planning Staff

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### Background/Considerations:

The Zoning Regulations include impervious coverage limits for different zoning districts, overlay districts and urban design districts. The maximum coverage allowed varies by district; however, the same definition of impervious coverage and impervious material applies to all districts. Many of the commercial districts and overlay districts do not include impervious coverage limitations, while the residential districts do. Below is the definition of impervious coverage and the definition of impervious material:

*Section 405.390 Definitions [Ord. No. 5814 §1(Art. 3), 4-27-2004; Ord. No. 6010 §1, 1-22-2008; Ord. No. 6022 §1(Att. B), 7-8-2008; Ord. No. 6159 §1, 9-13-2011; Ord. No. 6191 §2, 2-28-2012]*

- *IMPERVIOUS COVERAGE: That area within a lot that is covered by impervious materials.*
- *IMPERVIOUS MATERIAL: A surface that has been compacted or covered with a layer of material so that it is highly resistant to infiltration by water. It includes, but is not limited to, surfaces such as compacted sand, limerock or clay, asphalt concrete, driveways, retaining walls, stair wells, stairways, walkways, decks and patios at grade level and other similar structures. For the purposes of calculating impervious coverage, pools and other water features shall only count at fifty percent (50%) of the actual water area.*

The impervious coverage regulation has historically served a dual purpose of reducing stormwater runoff and preserving green space. In recent years, house and structure footprints have increased and the use of stormwater management techniques has become more popular in residential areas. Methods such as green roofs, decks, permeable pavers and gravel patios or walkways may allow water to pass through and mitigate some potential stormwater impacts of hardscape surfaces, these methods do not also satisfy the intent of the code to preserve green, vegetated areas in residential neighborhoods. It is of the opinion of staff that the intent of the impervious coverage percentage limitations is also to maintain a ratio of building and hardscape to greenspace. The current definition of impervious material does not protect or specifically address the greenspace intent of the code with the new technology that is becoming more popular. It is the opinion of staff that the impervious coverage definition should be clarified to help protect the historical intent and interpretation of the code and to also allow for a more consistent application of the definition and code.

The definition currently states that “decks and patios at grade” count as impervious coverage. The Zoning Regulations do not include a definition of decks at grade. Historically, this portion of the definition has been enforced in multiple ways, leading to inconsistency. Decks have been included in impervious coverage calculations at one-hundred percent, fifty percent and zero percent. Decks have also been included based on

height above grade using the idea that decks above grade allow for vegetation to survive below, which becomes an area that can soak up stormwater runoff that drains through the deck surface. The City's contracted landscape architect has previously advised that a minimum of three to four feet would be needed between grade and the deck to allow plants to survive. Staff has used the three (3) foot height minimum to enforce the decks at grade; however, this definition does not address the greenspace intent of the code and can be difficult to address when working with existing conditions. For example, when on a slope, is the average difference between grade and the deck used or the highest point? Also, when reviewing surveys, staff does not have the height off grade information and often neither does the contractor.

The St. Louis Metropolitan Sewer District (MSD) counts decks toward impervious coverage, no matter the height off grade. Decks can be constructed in different manners, so the amount of water flowing through the deck is difficult to regulate and is often less than one-hundred percent (100%). Research into other municipal codes found that decks are handled in different ways. Some codes are similar to MSD and view decks as one-hundred percent (100%) impervious, while many municipalities use percentages of the deck area. The most common calculations found were fifty percent (50%) and seventy-five percent (75%) of the deck area. Gaps between deck boards do allow some water to flow to grade and while that amount of water can vary based on the design of the deck, using a set percentage allows the code to be consistently enforced and easily applied. Staff believes that counting seventy-five percent (75%) of deck areas as impervious would align with the intent of the code, historical interpretations and is more consistent with MSD regulations.

**Determination/Clarification:**

The proposed modification will not significantly alter the enforcement of impervious coverage, it but will provide a clearer definition that aligns with the historic enforcement of the regulation. Two specific clarifications are proposed by staff. The first is highlighting the intent of the code to protect greenspace and not just stormwater runoff. The second is clarifying how decks are treated. Instead of using height off grade to address decks as impervious coverage, staff proposes using a percentage of the deck area, similarly to how the definition addresses pools.

Staff proposes the following definition clarification:

- **IMPERVIOUS MATERIAL:** A surface not intended for landscape, lawn, plantings or vegetation or a surface that has been compacted or covered with a layer of material so that it is highly resistant to infiltration by water. Impervious surface includes, but is not limited to, structures, roofs, surfaces such as compacted sand, limerock or clay, asphalt, concrete, pavers, driveways, width of retaining walls, stair wells, stairways, walkways, patios, and other similar structures. For the purposes of calculating coverage, permeable pavement, gravel walkways/patios and similar ground cover does count as impervious coverage. Decorative, loose gravel within landscape/planting beds shall not count as coverage. Decks (with gaps between slats) shall count at seventy-five percent (75%) of the actual surface, unless pavement is located below the deck or a roof is located over the deck, in which case the area shall count at one-hundred percent (100%). Pools and other water features shall only count at fifty percent (50%) of the actual water area.

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