

PLANNING AND DEVELOPMENT SERVICES DEPARTMENT

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Agenda Item No. 16

TO: Town Council

FROM: Amy Ward, Community Development Director and Rodney Walters, Town Forester / GIS Assistant

FOR: Town Council Regular Meeting **DATE:** March 21, 2024

RE: Work Session regarding potential future Community Development Code (CDC) Amendments, 17.6.1 Environmental Regulations-Fire Mitigation and Tree Protections

Attachments can be found at the following link

< https://mtnvillage.files.com/f/d617ebe977d8249c > :

- CDC, Environmental Regulations amendments, draft
- The Colorado State Forest Service <u>The Home Ignition Zone</u>, <u>A guide to preparing your</u> <u>home for wildfire and creating defensible space</u>
- National Wildfire Coordinating Group <u>NWCG Standards for Mitigation in the Wildland</u> <u>Urban Interface, PMS 052</u>, May, 2023
- Managing Trees During Site Development and Construction, Third Edition, 2023
- <u>Relative Tolerance of Selected Species to Development Impacts (adapted from Matheny</u> and Clarke, 1998)
- Example Tree Protection sign City of Denver Tree Protection Zone sign

CDC Amendment Workshop Discussion – Recommended Updates to Environmental Regulations

Background:

The current Wildfire Mitigation and Forestry Management Regulations in the CDC are either out of date or do not currently align with accepted best management practices (BMPs)/standards or both. Regulatory requirements that align with wildfire mitigation and forest management BMPs and standards will be more effective in facilitating desirable outcomes. Updates to the CDC will provide regulatory requirements that align with up-to-date scientific knowledge and currently accepted professional BMPs and standards. The Wildfire Mitigation zones listed in the CDC are based on 2003 Colorado State Forest Service standards (Creating Wildfire-Defensible Zones, no. 6.302), which has since been replaced by new standards (<u>The Home Ignition Zone</u>) and the <u>NWCG Standards of Mitigation in the Wildland Urban</u> <u>Interface</u>. The wildfire mitigation zones in the new standards are defined differently from the way they are defined in the CDC, which makes communicating about defensive space standards with our business owners and residents challenging. In order to best protect our community and communicate with community members about wildfire mitigation, we recommend that the CDC wildfire mitigation standards be updated to reflect current BMPs and Standards.

The zones in the new standards are defined as follows.

- <u>Zone 1, 0 5 feet from the Building</u>: (removal of all flammable materials, including vegetation (sod, shrubs, slash, mulch, and other woody materials).
- <u>Zone 2, 5 30 feet from the Building</u>: Reduce fuels in this area transitioning away from the building (designed to significantly reduce fire intensity by creating space between the building, trees, and other flammable vegetation)
- <u>Zone 3, 30 100 feet away from the Building or up to 200 feet on steep slopes:</u> The focus of this zone is to implement measures to keep fire on the ground and to drive active crown fire to the ground where it will be less intense. This is accomplished by limbing up conifers and creating or maintaining space in between crowns.

These new zone definitions eliminate the need to define zones based on assessing slope steepness and utilizing charts. This will eliminate ambiguity and confusion in defining and understanding zones. Because these new zone definitions will represent a significant shift in the way buildings and associated landscapes are designed , we want to verify the Council is in support of these changes prior to implementing these CDC changes, which are described in more detail below.

- The intention of Zone 1 is to create a non-flammable hardscape (flagstone, lava rock, gravel mulch, etc.) to keep flames from coming into direct contact with the building.
 - Sod would still be allowed for new developments, but not right up to the side of buildings. Planters would be minimally allowed (but not under windows, adjacent to vents, or other areas, such as when there is minimal space between adjacent buildings).
 - Is the Council willing to defend this new approach, which will better reflect current BMPs and standards for defensible space?
- The purpose of Zone 2 is to reduce fire intensity. Our current CDC requirement allows very little to no vegetation 15 feet from buildings. –
 - This new zone definition would reduce vegetation out to 30 feet away from buildings but would still allow for some woody plants (mostly shrubs but also a limited amount of trees or planters unattached to the home) and would allow for some more intentional landscaping.

The Tree protection standards in the CDC do not currently reflect the latest BMPs for Tree Protection During Site Development. Most importantly as they relate to tree protection fencing. The CDC sets the drip edge of the tree canopy and the place-to-place tree protection fencing. Since most our trees are forest trees, the drip edge of the canopy rarely even meets protections for the critical root zone (minimum space required for trees to meet their physiological functions long term) and does not consider the BMPs for establishing and maintaining a Tree Protection Zone (TPZ), which takes other factors into consideration, including the species tolerance to site disturbance and age of the tree(s). The current requirement of plastic snow fencing for tree protection is ineffective because it is easily knocked down or moved and because it does not provide enough space for long term tree health and survival. It often takes trees 5 years to show signs of decline after construction has occurred. If the current BMPs are adopted into the CDC, it would be likely that a greater amount of trees will be planned for removal during development. However, it would mean that more trees that are planned for retention would survive and thrive long-term, thus providing better outcomes for property owners and the community. Trees that are unlikely to survive would be removed before construction begins, which would save the expense and inconvenience of working around trees that have been unrealistically planned for retention.

Bringing the CDC into alignment with current BMPs would change how tree protection is conducted in the Town of Mountain Village during development. For that reason, we are asking the if the Town Council will support us if we implement the following changes?

- Define a Tree Protection Zone (TPZ) according to the formula recommended by the current BMPs, which includes tree diameter (dbh), age of the tree and tree species relative tolerance to construction disturbances.
- Construct a chain link fence with a rigid top rail attached to round, hollow 2-inch steel posts set 2 feet into the ground at a maximum 10 foot spacing. This type of fencing would require more effort and expense to install, but would ensure better long-term tree survival, health, and structural stability.
- > Require a tree protection sign to be affixed to the protection fencing.