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Engineering Department

To: Rusty Bost, Director of Engineering and Building Services

From: Tucker Johnson, Assistant City Engineer

Date: June 1, 2020

Re: Revised Grading Policy

In an effort to promote good design and to reduce the number of grading and drainage problems associated with subdivision development, the following minimum design standards have been established:

- A detailed lot grading plan will be required with the overall construction plan set (pad elevations and swales between terraced lots will be required on the grading plan). Additional cross sections across the subdivision may be required as necessary to evaluate the slope impacts.
- Typical lot grading will require a maximum 5:1 slope for 20' to provide a rear yard. 5:1 maximum side slopes will be required also. Beyond this, the maximum cut/fill slopes should be 3:1 unless otherwise approved by the City. Steeper slopes may be considered in natural areas.
- Adequate terracing should be properly established on cut/fill slopes greater than 10 feet. Engineered swales/ditches should be designed/constructed at the toe of all slopes greater than 5 feet in height and/or transporting more drainage other than just overland, single lot, rear yard flow.
- All engineered swales/ditches are to be located within a dedicated 10 foot general drainage and utility easement.
- Principal building envelope lines should be located (at a minimum) 20 feet from any general drainage and utility easements used for drainage, and/or the top or bottom of any slope. Side envelope lines may be reduced to 10 foot minimum if all concentrated drainage is conveyed by an approved engineered system to the toe of the slope or closest drainage system.
- When terracing between structures, 6 foot minimum distance should be maintained between the top or bottom of the slope and the side of the building. Any concentrated runoff such as roof drains should be conveyed by an engineered system to the toe of any slope.
- When retaining walls are utilized for grade changes, the difference in grade should be no more than eight feet in height. Elevation changes in excess of 30 inches will require the installation of a safety rail/fence. All retaining wall designs shall be sealed by a professional engineer and included with the overall construction plan set.

These grading/drainage guidelines are considered minimum acceptable construction practices in all subdivision developments. Alternate methods which achieve the minimum standards contained herein may be submitted and considered by City staff. Such submittals should exhibit good engineering practices of drainage and grading principals related to the appropriate type of development being proposed.