## ORDINANCE NO. O2021-021

## AN ORDINANCE OF THE CITY COUNCIL OF THE CITY OF YUMA, ARIZONA, AMENDING CHAPTER 192 OF THE YUMA CITY CODE, AS AMENDED, RELATING TO STORMWATER RUNOFF IN NEW DEVELOPMENTS WITHIN THE CITY LIMITS OF THE CITY OF YUMA

WHEREAS, during routine review of City of Yuma codes, several instances of errors and outdated information were discovered in the content of the Stormwater Runoff in New Construction code provision (Chapter 192); and,

WHEREAS, the proposed changes update retention requirements to reflect current best practices for basin drainage times; and,

WHEREAS, the proposed amendments to Chapter 192 bring references current but do not otherwise change the meaning or intent of Chapter 192.

NOW THEREFORE, BE IT ORDAINED by the City Council of the City of Yuma, as follows:

<u>SECTION 1:</u> Yuma City Code, Chapter 192, Section 192-02(B) is amended to insert the following bolded text and delete the strikethrough text while leaving the remainder of Chapter 192, Section 192-02 unchanged:

§ 192-02 Purpose; Exception.

(B) This chapter and its revision(s) are intended to be as closely compatible with the long range goals of the Yuma County Flood Control District's future Storm Drainage Master Planas is possible.

<u>SECTION 2:</u> Yuma City Code, Chapter 192, Section 192-04 is amended to insert the following bolded text and delete the strikethrough text while leaving the remainder of Chapter 192, Section 192-04 unchanged:

§ 192-04 Retention Basin Standards.

When a retention basin is utilized to handle storm water runoff in a residential subdivision, the following design standards shall be applicable **unless otherwise approved by the City Engineer**:

(A) The minimum storage volume shall be computed by estimating the area under a hydrograph of a 100-year storm of two-hour duration (1.22 inches per hour) as shown in division (J) of this section. In addition, the greater of either one foot of freeboard or 25% additional basin capacity shall be provided in the facility.

(B) Maximum basin depth shall not exceed three and one-half feet unless otherwise approved by the City Engineer. When **If** additional depth is approved, the facility shall be enclosed with a six foot six-foot high masonry block fence and 16 foot 16-foot wide wood gate with lock.

(C) Maximum side slope shall be four to one unless otherwise approved by the City Engineer.

(D) An acceptable method of transporting water from the street into the basin shall be provided so as to preserve the integrity of the basin walls and floor.

(E) Daily nuisance water from lawn watering, car washing, and the like, shall be intercepted by dry wells prior to reaching the earthen floor of the retention basin and disposed of by utilization of a percolation field.

(F) All residential streets shall be designed to carry the runoff from a ten 10-year, two two-hour storm between the curbs. In cases where the peak flows from the design storm exceeds the street capacity, storm sewers of sufficient size to carry the excess must be installed. The minimum pipe size for underground storm drainage shall be 12-18-inches or as approved by the City Engineer. The peak flow from a 50 year50-year storm must be carried within the cross-section between buildings (front yards and street) for subdivisions served by retention basins.

(G) The floor elevations of all habitable space shall be above flood levels equivalent to a 100 year100-year storm.

(H) All streets shall have vertical curb with minimum longitudinal slope as shown in the table below, designed in accordance with accepted City of Yuma Construction Standards.

(I) Each retention basin shall be constructed so that storm water will not stand **after termination of a storm event for** longer than five days **in the valley or 36 hours on the mesaafter** termination of the storm. Basin drainage shall be accomplished by infiltration or by controlled flow into an existing facility suitable to receive, transport and dispose of storm water. When controlled flow is proposed, the owner/developer and the city shall obtain approval from the owner of the existing facility prior to formulating final drainage plans for the retention basin. Final drainage plans shall be subject to the review and approval of the City Engineer.

<u>SECTION 3:</u> Yuma City Code, Chapter 192, Section 192-05 is amended to insert the following bolded text and delete the strikethrough text while leaving the remainder of Chapter 192, Section 192-05 unchanged:

§ 192-05 On-Site Retention Standards; Residential, Commercial and Industrial.

(A) Residential. When on-site retention is utilized in residential subdivisions, the following design criteria shall be applicable:

(1) Minimum lot size for on-site retention shall be 8,000 square feet. A deed covenant prohibiting alteration of the final site ground elevations shall be required. The minimum design depth of storm water storage on any lot shall not exceed eight inches except as approved by the City Engineer.

(2) The lot depth below the back edge of the sidewalk shall be computed using a 100 year100year storm of 24 hour24-hour duration with 3.85 inches of total rainfall. An allowance for evaporation and/or percolation shall not be incorporated into the computations for minimum lot depth. Storage volume shall also be provided for adjacent streets and alleys except for arterial streets.

(3) Each lot shall be provided with an earthen berm around the back and sides of each lot. The earthen berm shall be one foot higher than the adjacent final ground elevation of the lot.

(4) All residential streets shall have vertical curb and gutter designed in accordance with accepted city construction standards. An appropriate means of transporting water into the storage area shall be provided.

(5) Slope away from building shall not exceed 20:1 for a distance of five feet out from the foundation.

(B) Commercial, industrial. When on-site retention is utilized in commercial and industrial developments, all storm water from a 100 year100-year storm of one hour duration (2.25 inches) must be retained on-site. Dry wells will be permitted to drain surface retention areas. However, the infiltration cannot be considered to reduce the volume of the retention area. The City of Yuma shall not be responsible for the design, performance, operation or maintenance of dry wells or retention basins in commercial or industrial developments. Dry wells shall not be located within 20 feet of any building(s).

<u>SECTION 2:</u> It shall be unlawful for any person, firm or corporation to violate, or cause the violation of, any provision of this ordinance. Unless otherwise specifically provided for in this chapter, any person or firm or corporation violating any of the provisions in this ordinance shall be guilty of a class 3 misdemeanor, and upon conviction thereof shall be punished by a fine not to exceed \$500 or by imprisonment for not more than one day or by both fine and imprisonment. Each day the violation shall constitute a separate offense or misdemeanor.

<u>SECTION 3:</u> If any part or portion of this ordinance is found invalid or unconstitutional by the decision of a court of competent jurisdiction, such decision shall not affect the validity of the remaining part or portion of this ordinance.

Adopted this \_\_\_\_\_\_ day of \_\_\_\_\_\_, 2021.

APPROVED:

Douglas J. Nicholls Mayor

ATTESTED:

Lynda L. Bushong City Clerk

APPROVED AS TO FORM:

Richard W. Files City Attorney