Atlas 14 – Summary of Recommended Code Changes

The National Weather Service recently completed a historical rainfall study, known as Atlas 14, which shows that severe rainfall in Austin is expected to occur more frequently than previously thought. This increase in rainfall means that more buildings and more land in Austin are susceptible to flooding. In response to our new understanding of flood risk, the Watershed Protection Department is proposing to amend the City Code to ensure that the health, safety, and welfare of our residents are protected from flooding.

This document provides a summary of the proposed code amendments in order of appearance in the draft ordinance (dated November 30, 2018).

Parts 1 and 2 - City Code Section 25-7-2 (Definitions)

- Add a definition of "Atlas 14," which is referenced in subsequent sections.
- Revise the definitions of "100-year floodplain" and "25-year floodplain" to refer to new code sections that describe how the floodplain areas are calculated (see Parts 4 and 5).

Part 3 – existing City Code Section 25-7-6, renumbered to 25-7-8 (*Computation of Stormwater Runoff*)

• Clarify that the calculation of the 500-year floodplain is based on the existing impervious cover in a watershed or drainage area, rather than the maximum amount of impervious cover allowed under zoning or watershed regulations.

Part 4 – new City Code Section 25-7-6 (*Determination of the 100-Year Floodplain*)

• Revise the methodology for determining the 100-year floodplain to reflect the Atlas 14 rainfall data. It will take approximately two years for the City to remap all 100-year floodplains using the Atlas 14 rainfall data. However, the current 500-year floodplain is a very close proxy for the Atlas 14 100-year floodplain. This code amendment provides two options for determining the 100-year floodplain in this interim period. An applicant can either use the Atlas 14 data to calculate the 100-year floodplain under fully developed conditions, or use the current FEMA 500-year floodplain. The exception to this methodology is the floodplain of the Colorado River; the code amendment specifies that the 100-year regulatory floodplain for the Colorado River remains the same (i.e., the current 100-year floodplain).

New City Code Section 25-7-7 (Determination of the 25-Year Floodplain)

• Revise the methodology for determining the 25-year floodplain to reflect Atlas 14 data. Like the changes for the 100-year floodplain described above, this amendment provides two options for determining the 25-year floodplain. An applicant can either use the Atlas 14 data to calculate the 25-year floodplain under fully developed conditions, or use the current 100-year floodplain calculated under fully developed conditions. The exception to this methodology is the floodplain of the Colorado River; the code amendment specifies that the 25-year regulatory floodplain for the Colorado River remains the same (i.e., the current 25-year floodplain).

Part 5 – City Code Section 25-7-93 (General Exceptions)

- Subsection (A)(2) is revised to remove an existing exception and create a new exception for constructing a residential building within the 100-year floodplain. The existing exception allows for the construction of a single-family or duplex residential building within the 100-year floodplain if the lot was platted before September 25, 1983. This provision is removed and replaced with a broader redevelopment exception that allows a new residential building to encroach within the 100-year floodplain if it is replacing an existing legally constructed residential building and does not increase the number of dwelling units on the property regardless of plat date.
- Subsection (A)(4) is revised to expand the existing exemption for development within the 100-year floodplain of Lady Bird Lake or the Colorado River to also apply to Lake Austin and Lake Travis.
- Subsection (B) is revised to clarify that development approved under the listed exceptions must meet specific criteria. Current code lists two criteria under this section: floodproofing and no adverse impact. This amendment includes those two criteria and adds two additional criteria: compensation for floodplain volume and freeboard. The compensation for floodplain volume criterion is currently part of the no adverse impact criterion and is added here for emphasis. The freeboard criterion is also part of the current code. However, the freeboard requirement is being increased from one foot to two feet.

Part 6 – City Code Section 25-7-96 (Requirements in the 25-Year Floodplain)

- Subsection (A) is reworded for clarity.
- Subsection (B)(2) is revised to establish an equivalent redevelopment exception for residential development within the 25-year floodplain (see the description of Part 6, above).
- Subsection (C) is revised to clarify that development approved under the listed exceptions must meet specific criteria, as explained above in Part 6, subsection (B).

Part 7 – City Code Section 25-8-1 (*Definitions*)

• The definition of "floodplain modification" is revised to refer to the new section on determining the 100-year floodplain (Section 25-7-6).

Part 8 – City Code Section 25-8-92 (Critical Water Quality Zones Established)

• Subsections (A), (C), and (F) regarding critical water quality zone boundaries are revised to refer to the new section on determining the 100-year floodplain (Section 25-7-6).

Part 9 - City Code Section 25-8-121 (Environmental Resource Inventory Requirement)

• Subsection (A) is revised to remove floodplains from the list of property characteristics that require preparation of an environmental resource inventory.

Part 10 – Subsection 202.1 (*Amended Definitions*) of City Code Section 25-12-3 (*Local Amendments to the Building Code*)

• The definitions of "base flood," "design flood," "flood hazard area," and "floodway" are amended to be consistent with the new methodology for determining the 100-year floodplain.

Part 11 – Subsection 1612.3 (*Establishment of Flood Hazard Areas*) of City Code Section 25-12-3 (*Local Amendments to the Building Code*)

• Subsection 2 is revised to clarify that the establishment of flood hazard areas is linked back to the definitions of 100-year floodplain and 25-year floodplain.

Part 12 – Subsection 1612.4.1 (*Freeboard*) of City Code Section 25-12-3 (*Local Amendments to the Building Code*)

• The minimum freeboard requirement for structures in the floodplain is increased from one foot to two feet. This means that the finished floor elevation of the building must be at least two feet above the 100-year floodplain.

Part 13 – Subsection G103.3 (*Determination of Design Flood Elevations*) of Appendix G (*Flood Resistant Construction*) of City Code Section 25-12-3 (*Local Amendments to the Building Code*)

• Subsection 2 is revised to clarify that the determination of design flood elevations is linked back to the definition of 100-year floodplain.

Part 14 – Subsection 320.2 (*Establishment of Flood Hazard Areas*) of City Code Section 25-12-133 (*Local Amendments to the 2015 Uniform Mechanical Code*)

• Subsection 2 is revised to clarify that the establishment of flood hazard areas is linked back to the definitions of 100-year and 25-year floodplain.

Part 15 – Subsection 321.8 (*Establishment of Flood Hazard Areas*) of City Code Section 25-12-153 (*Local Amendments to the Uniform Plumbing Code*)

• Subsection 2 is revised to clarify that the establishment of flood hazard areas is linked back to the definitions of 100-year floodplain and 25-year floodplain.

Parts 16, 17, 18, and 19 – various sections of City Code Section 25-12-243 (Local Amendments to the International Residential Code)

• Various definitions are revised to be consistent with the revised definitions and new methods of determining the 100-year floodplain and 25-year floodplain.

Parts 20, 21, 22, 23, 24, 25, and 26 – various sections of City Code Chapter 30-4 (*Drainage*) and the 30-5 (Environment)

• Corresponding sections of Chapters 30-4 and 30-5 are amended to match the proposed changes to Chapters 25-7 and 25-8.