13/90

(b) transferring in fee simple or placing restrictions on mitigation land approved by the director of the Watershed Protection Department and meeting the following conditions:

(i) located within the same watershed classification;

(ii) in accordance with the procedures in Section 25-8-26 (*Redevelopment Exception in the Barton Springs Zone*), Subsection (H) (3);

(iii) dedicated to or restricted for the benefit of the City or another entity approved by the Watershed Protection Department director and which the City or other approved entity accepts;

(iv) an amount proportionate to the amount of area within the existing floodplain that is proposed to be modified, as prescribed in the Environmental Criteria Manual; or

(c) a combination of the mitigation methods described in Subparagraphs (a) - (b), if approved by the director of the Watershed Protection Department.

PART 43. A new City Code Section 25-8-365 is added to read:

§ 25-8-365 INTERBASIN DIVERSION

(A) Development may not divert stormwater from one watershed to another, except as authorized by this section.

(B) A proposed diversion of less than 20% of the site based on gross site area or less than 1 acre, whichever is smaller, may be allowed if the applicant demonstrates that:

(1) existing drainage patterns are maintained to the extent feasible; and

(2) there are no adverse environmental or drainage impacts.

PART 44. A new City Code Chapter 25-8, Subchapter A, Article 8 is added to read as follows and the remaining Articles are renumbered accordingly:

ARTICLE 8. URBAN WATERSHED REQUIREMENTS.

§ 25-8-371 APPLICABILITY; COMPLIANCE.

(A) This article applies to development in an urban watershed.

(B) A person who develops in an urban watershed must comply with the requirements of this article.

§ 25-8-372 UPLANDS ZONE.

(A) This section applies to development in an uplands zone. Impervious cover limits in this section are expressed as percentages of gross site area.

(B) Maximum impervious cover for development within the City's zoning jurisdiction is established in Section 25-2-492 (*Site Development Regulations*).

(C) Maximum impervious cover for development outside the City's zoning jurisdiction is 80 percent.

PART 45. City Code Sections 25-8-392 (*Critical Water Quality Zone*) and 25-8-393 (*Water Quality Transition Zone*) are deleted in their entirety and the remaining sections renumbered accordingly.

PART 46. City Code Section 25-8-394 (*Uplands Zone*) is amended to read:

C3/91

§ 25-8-392[~~394~~] UPLANDS ZONE.

(A) This section applies to development in an uplands zone. Impervious cover limits in this section are expressed as percentages of gross [~~net~~] site area.

(B) This subsection applies in the extraterritorial jurisdiction and in the portions of the Lake, Rattan, Buttercup, South Brushy, and Brushy Creek watersheds that are in the zoning jurisdiction.

(1) Impervious cover for a single-family residential use with a minimum lot size of 5,750 square feet may not exceed:

(a) 45 percent; or

(b) if development intensity is transferred under Section 25-8-393[~~395~~] (*Transfer Of Development Intensity*), 50 percent.

(2) Impervious cover for a duplex or single-family residential use with a lot smaller than 5,750 square feet in size may not exceed:

(a) 55 percent; or

(b) if development intensity is transferred under Section 25-8-393[~~395~~] (*Transfer Of Development Intensity*), 60 percent.

(3) Impervious cover for a multifamily residential use may not exceed:

(a) 60 percent; or

(b) if development intensity is transferred under Section 25-8-393[~~395~~] (*Transfer Of Development Intensity*), 65 percent.

(4) Impervious cover for a commercial use may not exceed:

(a) 65 percent; or

(b) if development intensity is transferred under Section 25-8-393[~~395~~] (*Transfer Of Development Intensity*), 70 percent.

(5) Impervious cover for mixed use may not exceed:

(a) the limits in subsection (B) (3) for the portion of the ground floor that is multifamily residential;

(b) the limits in subsection (B) (4) for the portion of the ground floor that is commercial; and

(c) impervious cover for the entire site shall be based on the ratios determined on the ground floor.

(C) This subsection applies in the portion of the zoning jurisdiction that is outside the Lake, Rattan, Buttercup, South Brushy, and Brushy Creek watersheds.

(1) Impervious cover for a single-family residential use with a minimum lot size of 5,750 square feet may not exceed:

(a) 50 percent; or

(b) if development intensity is transferred under Section 25-8-393[~~395~~] (*Transfer Of Development Intensity*), 60 percent.

(2) Impervious cover for a duplex or single-family residential use with a lot smaller than 5,750 square feet in size may not exceed:

(a) 55 percent; or

(b) if development intensity is transferred under Section 25-8-393[~~395~~] (*Transfer Of Development Intensity*), 60 percent.

(3) Impervious cover for a multifamily residential use may not exceed:

(a) 60 percent; or

(b) if development intensity is transferred under Section 25-8-393[~~395~~] (*Transfer Of Development Intensity*), 70 percent.

(4) Impervious cover for a commercial use may not exceed:

(a) 80 percent; or

(b) if development intensity is transferred under Section 25-8-393[~~395~~] (*Transfer Of Development Intensity*), 90 percent.

(5) Impervious cover for mixed use may not exceed:

(a) the limits in subsection (C) (3) for the portion of the ground floor that is multifamily residential;

(b) the limits in subsection (C) (4) for the portion of the ground floor that is commercial; and

(c) impervious cover for the entire site shall be based on the ratios determined on the ground floor.

PART 47. City Code Section 25-8-395 (*Transfer of Development Intensity*) is amended to read:

§ 25-8-393[~~395~~] TRANSFER OF DEVELOPMENT INTENSITY.

(A) An applicant who complies with a provision of this subsection qualifies for the development intensity transfer described in the provision, subject to the requirements in subsection (B) and the impervious cover limitations in section 25-8-392 (*Uplands Zone*).

(1) The [~~For each acre of land in a critical water quality zone that an applicant dedicates in fee simple to the City the~~] applicant may transfer 20,000 square feet of impervious cover to an uplands zone for each acre of land in a critical water quality zone:

(a) dedicated to the City or another entity approved by the Watershed Protection Department director in fee simple and which the City or other approved entity accepts; or

(b) on which restrictions are placed to the benefit of the City or other approved entity and which the City or other approved entity accepts; and

(c) the applicant does not include in impervious calculations elsewhere.

(2) The applicant may transfer 20,000 square feet of impervious cover to an uplands zone for each acre of land in an uplands zone:

(a) located either in the 100-year floodplain or in an environmentally sensitive area as determined by environmental resource inventory and approved by the director of the Watershed Protection Department; and

C3/93

(b) dedicated to the City or another entity approved by the Watershed Protection Department director in fee simple and which the City or other approved entity accepts; or

(c) on which restrictions are placed to the benefit of the City or other approved entity and which the City or other approved entity accepts; and

(d) the applicant does not include in impervious calculations elsewhere.

(3) Land dedicated in fee simple to the City under this subsection may also be [~~to~~] credited toward the parkland dedication requirements of Chapter 25-4, Article 3, Division 5 (*Parkland Dedication*). ~~For each acre of land in the water quality transition zone that an applicant leaves undeveloped and undisturbed and does not include in impervious cover calculations elsewhere, the applicant may transfer 20,000 square feet of impervious cover to the uplands zone.~~

~~(3) For each acre of land in a water quality transition zone that an applicant uses for a golf course or other recreational use, restores using predominantly native plants and grasses, and provides a plan for minimizing the use and effect of pesticides, herbicides and fertilizers, the applicant may transfer 17,000 square feet of impervious cover to an uplands zone.~~

~~(4) For each acre of land in a water quality transition zone that an applicant uses for wastewater disposal, the applicant may transfer 10,000 square feet of impervious cover to an uplands zone~~.]

[~~(5) For each acre of land in an uplands zone that is located in the buffer zone of a critical environmental feature and that an applicant leaves natural and undisturbed, the applicant may transfer 20,000 square feet of impervious cover to an uplands zone. The buffer area may be included in the net site area calculations for the uplands zone.~~]

[~~(6) For each acre of land in an uplands zone that an applicant uses for wastewater irrigation, restricts against future development, and leaves in a natural state, other than for necessary irrigation lines and tailwater control berms, the applicant may transfer 20,000 square feet of impervious cover to an uplands zone~~.]

(B) An applicant who qualifies for a development intensity transfer under Subsection (A) must comply with requirements of this subsection to effect the transfer.

(1) For transfers between two subdivided tracts:

(a) An applicant may transfer development intensity to a receiving tract that is within the same watershed classification as the transferring tract[~~not more than one mile from the transferring tract~~]. This limitation does not apply if the transferring and receiving tracts are both owned by the applicant and are separated only by property that is also owned by the applicant.

(b)[(~~2~~)] An applicant must concurrently plat the transferring and receiving tracts and must transfer all development intensity at that time.

C3/94

(c)[(3)] An applicant must note the development intensity transfer on the plats of the transferring and receiving tracts, in a manner determined by the director.

(d)[(4)] An applicant must file in the deed records a restrictive covenant, approved by the city attorney, that runs with the transferring tract and describes the development intensity transfer.

(2) For transfers between two site plans

(a) An applicant may transfer development intensity to a receiving tract that is within the same watershed classification as the transferring tract. This limitation does not apply if the transferring and receiving tracts are both owned by the applicant and are separated only by property that is also owned by the applicant.

(b) The transfer must be noted on the receiving and transferring site plans;

(c) An applicant must file in the deed records a restrictive covenant, approved by the city attorney, that runs with the transferring tract and describes the development intensity transfer.

(d) The transfer must occur before the receiving and transferring site plans are released.

(3) For transfers within a single site plan, an applicant must file in the deed records a restrictive covenant, approved by the city attorney, that runs with the transferring tract and describes the development intensity transfer.

PART 48. City Code Section 25-8-422 (*Critical Water Quality Zone*) is deleted in its entirety and the remaining sections renumbered accordingly.

PART 49. City Code Section 25-8-423 (*Water Quality Transition Zone*) is amended to read:

§ 25-8-422]~~423]~~ WATER QUALITY TRANSITION ZONE.

(A) Development is prohibited in a water quality transition zone that lies over the South Edwards Aquifer recharge zone, except for:

(1) development described in Article 7, Division 1 (*Critical Water Quality Zone Restrictions*); and

(2) minor drainage facilities or water quality controls that comply Section 25-8-364 (*Floodplain Modification*) and the floodplain modification criteria in the Environmental Criteria Manual.

(B) In a water quality transition zone that does not lie over the South Edwards Aquifer recharge zone, the impervious cover of the land area of a site may not exceed 18 percent. In determining land area, land in the 100 year floodplain is excluded.

(C) Water quality controls ~~for development in an uplands zone or water quality transition zone~~ may ~~not~~ be located in a water quality transition zone that does not lie over the South Edwards Aquifer recharge zone.

C3/95

PART 50. City Code Section 25-8-424 (*Uplands Zone*) is amended to read:

§ 25-8-423[~~424~~[UPLANDS ZONE.

(A) This section applies to development in an uplands zone. Impervious cover limits in this section are expressed as percentages of net site area.

(B) Impervious cover for a duplex or single-family residential use may not exceed:

(1) 30 percent; or

(2) if development intensity is transferred under Section 25-8-424[~~425~~] (*Transfer Of Development Intensity*), 40 percent.

(C) Impervious cover for a commercial,[~~or~~] multifamily residential use, or mixed use may not exceed:

(1) 40 percent; or

(2) if development intensity is transferred under Section 25-8-424[~~425~~] (*Transfer Of Development Intensity*), 55 percent.

PART 51. City Code Section 25-8-425 (*Transfer of Development Intensity*) is amended to read:

§ 25-8-424[~~425~~[TRANSFER OF DEVELOPMENT INTENSITY.

(A) An applicant who complies with a provision of this section qualifies for the development intensity transfer described in the provision, subject to the requirements in subsection (B) and the impervious cover limitations in section 25-8-423 (*Uplands Zone*).

(1) The [~~For each acre of land in a critical water quality zone that an applicant dedicates in fee simple to the City the~~] applicant may transfer 15,000 square feet of impervious cover to an uplands zone for each acre of land in a critical water quality zone or water quality transition zone:

(a) dedicated to the City or another entity approved by the Watershed Protection Department director in fee simple and which the City or other approved entity accepts; or

(b) on which restrictions are placed to the benefit of the City or other approved entity and which the City or other approved entity accepts; and

(c) the applicant does not include in impervious calculations elsewhere.

(2) Land dedicated in fee simple to the City under this subsection may also be [~~to~~] credited toward the parkland dedication requirements of Chapter 25-4, Article 3, Division 5 (*Parkland Dedication*).

[~~(2) For each acre of land in the water quality transition zone that an applicant leaves undeveloped and undisturbed and does not include in impervious cover calculations elsewhere, the applicant may transfer 15,000 square feet of impervious cover to the uplands zone.~~

C3/96

~~(3) For each acre of land in a water quality transition zone that an applicant uses for a golf course or other recreational use, restores using predominantly native plants and grasses, and provides a plan for minimizing the use and effect of pesticides, herbicides and fertilizers, the applicant may transfer 12,750 square feet of impervious cover to an uplands zone.~~

~~(4) For each acre of land in a water quality transition zone that an applicant uses for wastewater disposal, the applicant may transfer 7,500 square feet of impervious cover to an uplands zone.~~

~~(5) For each acre of land in an uplands zone that is located in the buffer zone of a critical environmental feature and that an applicant leaves natural and undisturbed, the applicant may transfer 15,000 square feet of impervious cover to an uplands zone. The buffer area may be included in the net site area calculations for the uplands zone.]~~

~~[(6) For each acre of land in an uplands zone that an applicant uses for wastewater irrigation, restricts against future development, and leaves in a natural state, other than for necessary irrigation lines and tailwater control berms, the applicant may transfer 15,000 square feet of impervious cover to an uplands zone.~~]

(B) An applicant who qualifies for a development intensity transfer under Subsection (A) must comply with requirements of this subsection to effect the transfer.

(1) For transfers between two subdivided tracts:

(a) An applicant may transfer development intensity to a receiving tract that is within the same watershed classification as the transferring tract[~~not more than one mile from the transferring tract~~]. This limitation does not apply if the transferring and receiving tracts are both owned by the applicant and are separated only by property that is also owned by the applicant.

(b)[~~(2)~~] An applicant must concurrently plat the transferring and receiving tracts and must transfer all development intensity at that time.

(c)[~~(3)~~] An applicant must note the development intensity transfer on the plats of the transferring and receiving tracts, in a manner determined by the director.

(d)[~~(4)~~] An applicant must file in the deed records a restrictive covenant, approved by the city attorney, that runs with the transferring tract and describes the development intensity transfer.

(2) For transfers between two site plans

(a) An applicant may transfer development intensity to a receiving tract that is within the same watershed classification as the transferring tract. This limitation does not apply if the transferring and receiving tracts are both owned by the applicant and are separated only by property that is also owned by the applicant.

(b) The transfer must be noted on the receiving and transferring site plans;

(c) An applicant must file in the deed records a restrictive covenant, approved by the city attorney, that runs with the transferring tract and describes the development intensity transfer.

(d) The transfer must occur before the receiving and transferring site plans are released.

(3) For transfers within a single site plan, an applicant must file in the deed records a restrictive covenant, approved by the city attorney, that runs with the transferring tract and describes the development intensity transfer.

PART 52. City Code Section 25-8-452 (*Critical Water Quality Zone*) is deleted in its entirety and the remaining sections renumbered accordingly.

PART 53. City Code Section 25-8-453 (*Water Quality Transition Zone*) is amended to read:

§ 25-8-452[~~453~~] WATER QUALITY TRANSITION ZONE.

(A) Development is prohibited in a water quality transition zone that lies over the South Edwards Aquifer recharge zone, except for:

(1) development described in Article 7, Division 1 (*Critical Water Quality Zone Restrictions*); and

(2) minor drainage facilities or water quality controls that comply with Section 25-8-364 (*Floodplain Modification*) and the floodplain modification criteria in the Environmental Criteria Manual.

(B) Development is prohibited in a water quality transition zone that lies outside the South Edwards Aquifer recharge zone, except for:

(1) development described in Article 7, Division 1 (*Critical Water Quality Zone Restrictions*);

(2) streets;

(3) minor drainage facilities or water quality controls that comply with Section 25-8-364 (*Floodplain Modification*) and the floodplain modification guidelines of the Environmental Criteria Manual; and

(4) [~~parks or open spaces;~~] and

~~(5)~~]duplex or single-family residential development with a minimum lot size of two acres and a density of not more than one unit for each three acres, excluding acreage in the 100 year flood plain.

(C) A lot that lies within a critical water quality zone must also include at least two acres in a water quality transition zone or uplands zone.

[~~(D) Water quality controls may not be located in a water quality transition zone.~~]

PART 54. City Code Section 25-8-454 (*Uplands Zone*) is amended to read:

§ 25-8-453[~~454~~] UPLANDS ZONE.

C3/98

(A) This section applies to development in an uplands zone. Density and impervious cover limits are based on net site area.

(B) For a duplex or single family residential use, density may not exceed:

(1) one unit for each two acres, with a minimum lot size of three-quarters acre; or

(2) if development intensity is transferred under Section 25-8-454[~~455~~] (*Transfer Of Development Intensity*), one unit for each acre, with a minimum lot size of one-half acre.

(C) This subsection applies to cluster housing.[~~For a cluster housing use, density~~]

(1) Density may not exceed:

(a)[~~(1)~~] one unit for each acre; or

(b)[~~(2)~~] if development intensity is transferred under Section 25-8-454[~~455~~] (*Transfer of Development Intensity*), two units for each acre.

(2) At least 40 percent of the uplands area of a site must be retained in or restored to its natural state to serve as a buffer. The buffer must be contiguous to the development, and must receive overland drainage from the developed areas of the site. Use of the buffer is limited to fences, utilities that cannot reasonably be located elsewhere, irrigation lines not associated with wastewater disposal, and access for site construction. A wastewater disposal area may not be located in the buffer.

(D) This subsection applies to a commercial, [~~or~~]multifamily residential use, or mixed use.

(1) Impervious cover may not exceed:

(a) 20 percent; or

(b) if development intensity is transferred under Section 25-8-454[~~455~~] (*Transfer Of Development Intensity*), 25 percent.

(2) At least 40 percent of the uplands area of a site must be retained in or restored to its natural state to serve as a buffer. The [~~, the~~] buffer must be contiguous to the development, and [~~the buffer~~] must receive overland drainage from the developed areas of the site. Use of the buffer is limited to fences, utilities that cannot reasonably be located elsewhere, irrigation lines not associated with wastewater disposal, and access for site construction. A wastewater disposal area may not be located in the buffer.

PART 55. City Code Section 25-8-455 (*Transfer of Development Intensity*) is amended to read:

§ 25-8-454[~~455~~[TRANSFER OF DEVELOPMENT INTENSITY.

(A) An applicant who complies with a provision of this section qualifies for the development intensity transfer described in the provision, subject to the requirements in subsection (B) and the impervious cover limitations in section 25-8-453 (*Uplands Zone*).

(1) The [~~For each acre of land in a critical water quality zone that an applicant dedicates in fee simple to the City or another entity the~~] applicant may transfer

C3/99

one single-family residential housing unit or 6,000 square feet of impervious cover for commercial or multifamily development to an uplands zone for each acre of land in a critical water quality zone or water quality transition zone:

(a) dedicated to the City or another entity approved by the Watershed Protection Department director in fee simple and which the City or other approved entity accepts; or

(b) on which restrictions are placed to the benefit of the City or other approved entity and which the City or other approved entity accepts; and

(c) the applicant does not include in impervious calculations elsewhere.

(2) Land dedicated in fee simple to the City under this subsection may also be credited toward the parkland dedication requirements of Chapter 25-4, Article 3, Division 5 (*Parkland Dedication*).

~~[(2) For each acre of land in the water quality transition zone that an applicant leaves undeveloped and undisturbed and does not include in impervious cover calculations elsewhere, the applicant may transfer one single-family residential housing unit or 6,000 square feet of impervious cover for commercial or multifamily development to the uplands zone.~~

~~(3) For each acre of land in a water quality transition zone that an applicant uses for a golf course or other recreational use, restores using predominantly native plants and grasses, and provides a plan for minimizing the use and effect of pesticides, herbicides and fertilizers, the applicant may transfer 85 percent of a single-family residential housing unit or 5,100 square feet of impervious cover for commercial or multifamily development to an uplands zone.~~

~~(4) For each acre of land in a water quality transition zone that an applicant uses for wastewater disposal, the applicant may transfer 50 percent of a single-family residential housing unit or 3,000 square feet of impervious cover for commercial or multifamily development to an uplands zone.~~

~~(5) For each acre of land in an uplands zone that is located in the buffer zone of a critical environmental feature and that an applicant leaves natural and undisturbed, the applicant may transfer one single-family residential housing unit or 6,000 square feet of impervious cover for commercial or multifamily development to an uplands zone. The buffer area may be included in the net site area calculations for the uplands zone.~~

~~(6) For each acre of land in an uplands zone that an applicant uses for wastewater irrigation, restricts against future development, and leaves in a natural state, other than for necessary irrigation lines and tailwater control berms, the applicant may transfer one single-family residential housing unit or 6,000 square feet of impervious cover for commercial or multifamily development to an uplands zone.]~~

C3/100

(B) An applicant who qualifies for a development intensity transfer under Subsection (A) must comply with requirements of this subsection to effect the transfer.

(1) For transfers between two subdivided tracts:

(a) An applicant may transfer development intensity to a receiving tract that is within the same watershed classification as the transferring tract[~~not more than one mile from the transferring tract~~]. This limitation does not apply if the transferring and receiving tracts are both owned by the applicant and are separated only by property that is also owned by the applicant.

(b)[~~(2)~~] An applicant must concurrently plat the transferring and receiving tracts and must transfer all development intensity at that time.

(c)[~~(3)~~] An applicant must note the development intensity transfer on the plats of the transferring and receiving tracts, in a manner determined by the director.

(d)[~~(4)~~] An applicant must file in the deed records a restrictive covenant, approved by the city attorney, that runs with the transferring tract and describes the development intensity transfer.

(2) For transfers between two site plans:

(a) An applicant may transfer development intensity to a receiving tract that is within the same watershed classification as the transferring tract. This limitation does not apply if the transferring and receiving tracts are both owned by the applicant and are separated only by property that is also owned by the applicant.

(b) The transfer must be noted on the receiving and transferring site plans.

(c) An applicant must file in the deed records a restrictive covenant, approved by the city attorney, that runs with the transferring tract and describes the development intensity transfer.

(d) The transfer must occur before the receiving and transferring site plans are released.

(3) For transfers within a single site plan, an applicant must file in the deed records a restrictive covenant, approved by the city attorney, that runs with the transferring tract and describes the development intensity transfer.

PART 56. City Code Section 25-8-481 (*Applicability; Compliance*) is amended to read:

§ 25-8-481 APPLICABILITY; COMPLIANCE.

(A) This article applies to development in the Barton Springs Zone.

(B) A person who develops in the Barton Springs Zone must comply with the requirements of:

(1) this article; and

(2) Article 13[~~12~~] (*Save Our Springs Initiative*).

C3/10

PART 57. City Code Section 25-8-482 (*Critical Water Quality Zone*) is deleted in its entirety and the remaining sections renumbered accordingly.

PART 58. City Code Section 25-8-483 (*Water Quality Transition Zone*) is amended to read:

§ 25-8-482[~~483~~] WATER QUALITY TRANSITION ZONE.

(A) Development is prohibited in a water quality transition zone that lies over the Edwards Aquifer recharge zone, except for:

(1) development described in Article 7, Division 1 (*Critical Water Quality Zone Restrictions*); and

(2) minor drainage facilities or water quality controls that comply with Section 25-8-364 (*Floodplain Modification*) and the floodplain modification criteria [~~guidelines~~]of the Environmental Criteria Manual.

(B) Development is prohibited in a water quality transition zone that lies outside the Edwards Aquifer recharge zone, except for:

(1) development described in Article 7, Division 1 (*Critical Water Quality Zone Restrictions*);

(2) minor drainage facilities or water quality controls that comply with Section 25-8-364 (*Floodplain Modification*) and the floodplain modification guidelines of the Environmental Criteria Manual;

(3) streets; and

(4) duplex or single-family residential housing with a minimum lot size of two acres and a density of not more than one unit for each three acres, excluding acreage in the 100 year floodplain.[~~; and~~

~~(5) vegetative filter strips.~~]

PART 59. City Code Section 25-8-512 (*Amendment*) is amended to read:

§ 25-8-512 AMENDMENT.

This article [~~shall not be repealed or amended by city council until two years after the effective date of the SOS ordinance, August 10, 1992. Thereafter, this article~~] may be repealed or amended only by an affirmative vote of a three-quarters majority of the city council.

PART 60. City Code Section 25-8-514 (*Pollution Prevention Required*), Subsection A is amended to read:

(A) In the watersheds contributing to Barton Springs, no development nor any revision, extension, or amendment thereof, may be approved unless it is designed, carried out, and maintained on a site-by-site basis to meet the pollution prevention requirements set forth below for the life of the project. In order to prevent pollution, impervious cover for all such development shall be limited to a maximum of 15 percent in the entire recharge zone, 20 percent of the contributing zone within the Barton Creek watershed,

C3/102

and 25 percent in the remainder of the contributing zone. The impervious cover limits shall be calculated on a net site area basis. In addition, runoff from such development shall be managed through water quality controls and onsite pollution prevention and assimilation techniques so that no increases occur in the respective average annual loadings of total suspended solids, total phosphorus, total nitrogen, chemical oxygen demand, [~~biochemical oxygen demand,~~] total lead, cadmium, E. coli, [~~fecal coliform, fecal streptococci;~~] volatile organic compounds, total organic carbon, pesticides, and herbicides from the site. For a given project, impervious cover shall be reduced if needed to assure compliance with these pollutant load restrictions.

PART 61. City Code Section 25-8-516 (*Application to Existing Tracts, Platted Lots, and Public Schools*) is amended to add a new Subsection (D) to read:

(D) This article does not apply to a roadway project with less than 5,000 square feet of new impervious cover. For the purposes of this Section, roadway improvements are limited to intersection upgrades, low-water crossing upgrades, additions for bicycle lanes, and additions for mass transit stops.

PART 62. City Code Section 25-8-652 (*Fills at Lake Austin, Town Lake, and Decker Lake*) of the City Code is amended to read:

§ 25-8-652 FILLS AT LAKE AUSTIN, LADY BIRD [~~TOWN~~] LAKE, AND [~~DECKER~~] LAKE WALTER E. LONG.

(A) Approval by the Parks and Recreation Board is required to place fill in Lake Austin, Lady Bird [~~Town~~] Lake, or Lake Walter E. Long.

(B) A person must file a written application with the Parks and Recreation Board for an approval under this section.

(C) This section applies to a development application that includes a proposal to:

(1) modify the shoreline of Lake Austin, Lady Bird Lake, or Lake Walter E. Long; or

(2) dredge in or along that lake.

(D) Before the director may approve the development application, the director must submit the development application to the Parks and Recreation Board.

(E) The board shall review and comment on:

(1) the navigational safety of the proposed development; and

(2) the effect of the development on the recreational and natural character of the lake.

(F) The board may develop specific criteria for determining:

(1) the navigational safety of a proposed development; or

(2) the effect of a proposed development on the recreational and natural character of Lake Austin, Lady Bird Lake, or Lake Walter E. Long.

PART 63. City Code Section 25-8-691 (*Applicability*), Subsection (A) is amended to read:

(A) Except as provided in Subsection (B), this article applies to development in the areas of the planning jurisdiction described in Sections 25-8-693 (*Birds and Plants*),[~~and~~] 25-8-694 (Cave Species), and 25-8-695 (*Salamander Species*).

PART 64. City Code Section 25-8-693 (*Birds and Plants*) is amended to read:

§ 25-8-693 BIRDS AND PLANTS.

For an endangered bird or plant species, the requirements of Section 25-8-696 (*Notice*) [~~25-8-695 (Habitat Survey~~]) apply west of a line bounded by U. S. 183 North at the City's extraterritorial boundary limit, then southeast to Loop 1, then south along Loop 1 to U.S. 290 West, then west on U. S. 290 to R.M. 1826, and then south to the City's extraterritorial boundary limit.

PART 65 City Code Section 25-8-694 (*Cave Species*) is amended to read:

§ 25-8-694 CAVE SPECIES.

For an endangered cave species, the requirements of Section 25-8-696 (*Notice*) [~~25-8-695 (Habitat Survey~~])apply in the [~~Northern and Barton Springs segments of the~~] Edwards Aquifer Recharge Zone as defined by Section 25-8-2 (*Description of Regulated Areas*) [~~illustrated in the following maps:~~

~~(1) "Recharge Zones of the Edwards Aquifer Hydrologically Associated with Barton Springs in the Austin, Area, Texas," D. L. Slagle, A. F. Ardis and R. M. Slade, Jr., published by U. S. G. S. and the City of Austin, U.S.G.S. Water Resources Investigations Rept. 86-4062, 1986; and~~

~~(2) "Recharge Zone of the Northern Edwards Aquifer near Austin, Texas," L. DeLa Garza and D. L. Slade, published by the City of Austin Department of Environmental and Conservation Services, 1988.~~]

PART 66. City Code Section 25-8-695 (*Habitat Survey*) is deleted in its entirety.

PART 67. A new City Code Section 25-8-695 (*Salamander Species*) is added to read:

§ 25-8-695 SALAMANDER SPECIES.

For an endangered salamander species, the requirements of Section 25-8-696 (*Notice*) apply in the areas included in the salamander habitat map maintained by the Watershed Protection Department.

PART 68. City Code Section 25-8-696 (*Notice*), Subsection (A) is amended to read:

(A) On receipt of an application for subdivision or site plan approval in an area described in Section 25-8-693 (*Birds And Plants*),[~~or~~] 25-8-694 (*Cave Species*), or 25-8-695 (*Salamander Species*) the director shall give notice of the application [~~under Section 25-1-133(A) (Notice Of Applications And Administrative Decisions)~~] to the:

C3/104

(1) United States Fish and Wildlife Service;
(2) Texas Parks and Wildlife Department - Natural Heritage Program;
[~~(3) Land Use Commission;~~
~~(4) Environmental Board;~~
~~(5) City council;~~
~~(6) Travis County Commissioners Court; and~~]
(3) [~~(7)~~] Balcones Canyonland Conservation Plan Coordinating Committee Secretary.

PART 69. City Code Section 25-1-23 (*Impervious Cover Measurement*) is amended to read:

§ 25-1-23 IMPERVIOUS COVER MEASUREMENT.

(A) Except as otherwise provided in this section, impervious cover means the total area of any surface that prevents the infiltration of water into the ground, such as roads, parking areas, concrete, and buildings [~~is the total horizontal area of covered spaces, paved areas, walkways, and driveways~~].

(B) Impervious cover shall be calculated in accordance with the Environmental Criteria Manual and Section 25-8-63 (*Impervious Cover Calculations*). [~~excludes~~

~~(1) pools;~~
~~(2) ponds;~~
~~(3) fountains;~~
~~(4) areas with gravel placed over pervious surfaces that are used only for landscaping or by pedestrians; and~~
~~(5) a subsurface portion of a parking structure if the director determines that:~~
~~(a) the subsurface portion of the structure:~~
~~(i) is located within the urban roadway boundary depicted in Figure 2 of Subchapter E of Chapter 25-2 (Design Standards and Mixed Use), but outside the Barton Springs Zone;~~
~~(ii) is below the grade of the landthat existed before the construction of the structure;~~
~~(iii) is covered by soil with a minimum depth of two feet and an average depth of not less than four feet; and~~
~~(iv) has an area not greater than fifteen percent of the site;~~
~~(b) the structure is not associated with a use regulated by Section 1.2.2 of Subchapter F of Chapter 25-2 (Residential Design and Compatibility Standards);~~
~~(c) the applicant submits an assessment of the presence and depth of groundwater at the site sufficient to determine whether groundwater will need to be discharged or impounded; and~~

C3/105

~~(d) the discharge or impoundment of groundwater from the structure, if any, will be managed to avoid adverse effects on public health and safety, the environment, and adjacent property.~~

~~(C) For an uncovered wood deck that has drainage spaces between the deck boards and that is located over a pervious surface, 50 percent of the horizontal area of the deck is included in the measurement of impervious cover.~~

~~(D) The measurement of impervious cover to determine compliance with Chapter 25-8, Subchapter A (Water Quality) is prescribed by Chapter 25-8, Subchapter A, Article 1, Division 4 (Impervious Cover Determinations).~~]

PART 70. City Code Chapter 25-2, Subchapter B, Article 2, Division 5 Subpart B(*Planned Unit Development Standards*) section 2.4 (*Tier Two Requirements*) is amended to read:

§ 2.4. TIER TWO REQUIREMENTS.

This section contains criteria for determining the extent to which development proposed for a PUD district would be superior to that which would occur under conventional zoning and subdivision regulations as required under Section 1.1 (*General Intent*). A proposed PUD need not address all criteria in this section to achieve superiority, and the council may consider any other criteria the council deems appropriate.

Open Space	Provides open space at least 10% above the requirements of Section2.3.1.A. (*Minimum Requirements*). Alternatively, within the urban roadway boundary established in Figure 2 of Subchapter E of Chapter 25-2 (*Design Standards and Mixed Use*), provide for proportional enhancements to existing or planned trails, parks, or other recreational common open space in consultation with the Director of the Parks and Recreation Department.
Environment/Drainage	[~~Does not request exceptions to or modifications of environmental regulations.~~] Complies with current code instead of asserting entitlement to follow older code provisions by application of law or agreement.
	Provides water quality controls superior to those otherwise required by code.
	Uses [~~innovative~~] green water quality controls as described in the Environmental Criteria Manual to

C3/106

	[~~that~~] treat at least 50 [~~25~~] percent of the ~~additional water quality volume and provide 20 percent greater pollutant removal, in addition to the minimum~~ water quality volume required by code.
	Provides water quality treatment for currently untreated, developed [~~undeveloped~~] off-site areas of at least 10 acres in size.[~~with a drainage area of at least 25 percent of the subject tract.~~]
	Reduces impervious cover [~~or single family density~~] by five percent below the maximum otherwise allowed by code or includes off-site measures that lower overall impervious cover within the same watershed by five percent below that allowed by code.
	Provides minimum 50-foot setback for at least 50 percent of all unclassified waterways with a drainage area of 32 [~~five~~] acres[~~or greater~~].
	Provides volumetric flood detention as described in the Drainage Criteria Manual.
	Provides drainage upgrades to off-site drainage infrastructure that does not meet current criteria in the Drainage or Environmental Criteria Manuals, such as storm drains and culverts that provide a public benefit.
	Proposes no modifications to the existing 100-year floodplain
	Uses natural channel design techniques as described in the Drainage Criteria Manual.
	Restores riparian vegetation in existing, degraded Critical Water Quality Zone areas.
	Removes existing impervious cover from the Critical Water Quality Zone.
	Preserves all heritage trees; preserves 75% of the caliper inches associated with native protected size

C3/107

	trees; and preserves 75% of all of the native caliper inches.
	Tree plantings use Central Texas seed stock native and with adequate soil volume.
Environment/Drainage (Cont.)	Provides at least a 50 percent increase in the minimum waterway and/or [~~and~~] critical environmental feature setbacks required by code.
	Clusters impervious cover and disturbed areas in a manner that preserves the most environmentally sensitive areas of the site that are not otherwise protected.
	Provides porous pavement [~~pervious paving~~] for at least 20 [~~50~~] percent or more of all paved areas for non-pedestrian use in non-aquifer recharge areas.
	Provides porous pavement for at least 50 percent or more of all paved areas limited to pedestrian use.
	Provides rainwater harvesting for landscape irrigation to serve not less than 50% of the landscaped areas.
	Directs stormwater runoff from impervious surfaces to a landscaped area at least equal to the total required landscape area.
	Employs other creative or innovative measures to provide environmental protection.
Austin Green Builder Program	Provides a rating under the Austin Green Builder Program of three stars or above.
Art	Provides art approved by the Art in Public Places Program in open spaces, either by providing the art directly or by making a contribution to the City's Art in Public Places Program or a successor program.

C3/108

Great Streets	Complies with City's Great Streets Program, or a successor program. Applicable only to commercial, retail, or mixed-use development that is not subject to the requirements of Chapter 25-2, Subchapter E (*Design Standards and Mixed Use*).
Community Amenities	Provides community or public amenities, which may include spaces for community meetings, community gardens or urban farms, day care facilities, non-profit organizations, or other uses that fulfill an identified community need.
	Provides publicly accessible multi-use trail and greenway along creek or waterway.
Transportation	Provides bicycle facilities that connect to existing or planned bicycle routes or provides other multi-modal transportation features not required by code.
Building Design	Exceeds the minimum points required by the Building Design Options of Section 3.3.2. of Chapter 25-2, Subchapter E (*Design Standards and Mixed Use*).
Parking Structure Frontage	In a commercial or mixed-use development, at least 75 percent of the building frontage of all parking structures is designed for pedestrian-oriented uses as defined in Section 25-2-691(C) (*Waterfront Overlay District Uses*) in ground floor spaces.
Affordable Housing	Provides for affordable housing or participation in programs to achieve affordable housing.
Historic Preservation	Preserves historic structures, landmarks, or other features to a degree exceeding applicable legal requirements.
Accessibility	Provides for accessibility for persons with disabilities to a degree exceeding applicable legal requirements.
Local Small Business	Provides space at affordable rates to one or more independent retail or restaurant small businesses whose principal place of business is within the Austin metropolitan statistical area.

C3/109

PART 71. City Code Section 25-2-982 *(Conflicts with Other Provisions)*, Subsection (B) is amended to read:

(B) If this article conflicts with a provision of Chapter 25-6 *(Transportation)*, Chapter 25-7 (*Drainage*), Chapter 25-8 (*Environment*), or another provision of this chapter, those provisions prevail.

PART 72. City Code Section 25-2-1052 *(Exceptions)*, Subsection (D) is amended to read:

(D) This article does not apply to a passive use, including a park and hike and bike trail, in the 100 year flood plain if:

(1) the requirements of Chapter 25-8 (*Environment*) are met; and

(2) The use is within an easement dedicated to the City [~~a license agreement to place the use in a dedicated drainage easement is obtained~~], if applicable.

PART 73. City Code Section 25-2-1062 *(Height Limitations and Setbacks for Small Sites)*, Subsection (B) is amended to read:

(B) In this section, the term "structure" excludes a rain garden using no concrete that is designed in accordance with the Environmental Criteria Manual. If a site has a street frontage of 50 feet or less, a person may not construct a structure 15 feet or less from property:

(1) in an urban family residence (SF-5) or more restrictive zoning district; or

(2) on which a use permitted in an SF-5 or more restrictive zoning district is located.

PART 74. City Code Section 25-2-1063 *(Height Limitations and Setbacks for Large Sites)*, Subsection (B) is amended to read:

(B) In this section, the term "structure" excludes a rain garden using no concrete that is designed in accordance with the Environmental Criteria Manual. A person may not construct a structure 25 feet or less from property:

(1) in an urban family residence (SF-5) or more restrictive zoning district; or

(2) on which a use permitted in an SF-5 or more restrictive zoning district is located.

PART 75. City Code Section 25-2-1067 *(Design Regulations)*, Subsection (F) is amended to read:

(F) An intensive recreational use, excluding a multi-use trail and including a swimming pool, tennis court, ball court, or playground, may not be constructed 50 feet or less from adjoining property:

(1) in an SF-5 or more restrictive zoning district; or

(2) on which a use permitted in an SF-5 or more restrictive zoning district is located.

Chapter 25-2, Subchapter E, Article 2 (Site Development Standards) Section 2.3 Connectivity, subsection 2.3.1 B. 5.Sidewalk Credit.

PART 76. Chapter 25-2, Subchapter E, Article 2 (*Site Development Standards*), Section 2.3.1 (*Internal Circulation Systems for Large Sites*), Subsection B.5. is deleted in its entirety and Subsection B. 6. is renumbered as Subsection B. 5.

PART 77. City Code Section 25-4-132 *(Easements and Alleys)* Subsection (A) is amended to read:

(A) Easements for public utilities and drainage ways shall be retained in all subdivisions in the widths and locations determined necessary by the director. All easements shall be dedicated to public use for the named purpose and shall be aligned to minimize construction and future maintenance costs [~~cost~~].

PART 78. The Water Supply Mitigation Fund is established. The director of the Watershed Protection Department may allocate money from the Water Supply Mitigation Fund for the purchase of restrictions on or fee title of property within a Water Supply Rural or Water Supply Suburban watershed, either inside or outside the City of Austin's jurisdiction, as provided in City Code Section 25-8-28 (*Redevelopment Exception in the Water Supply Rural and Water Supply Suburban Watersheds*). The fee for mitigation under Section 25-8-27 (*Redevelopment Exception in the Barton Springs Zone*) shall apply to mitigation required under Sections 25-8-28 and 30-5-27(*Redevelopment Exception in the Water Supply Rural and Water Supply Suburban Watersheds*).

PART 79. The Riparian Zone Mitigation Fund is established. The director of the Watershed Protection Department may allocate money from the Riparian Zone Mitigation Fund for the purchase of restrictions on or fee title of property within the same watershed classification as the proposed floodplain modification either inside or outside the City of Austin's jurisdiction, as provided in City Code Sections 25-8-364 and 30-5-364 (*Floodplain Modification*). The fee for mitigation under City Code Section 25-8-27 (*Redevelopment Exception in the Barton Springs Zone*) shall apply to mitigation required under City Code Sections 25-8-364 and 30-5-364 (*Floodplain Modification*).

PART 80. City Code Chapter 30-4 (*Drainage*) is repealed and replaced with a new Chapter 30-4 to read as in the attached and incorporated **EXHIBIT B.**

PART 81. City Code Section 30-5-1 (*Definitions*) is amended to read:

§ 30-5-1 DEFINITIONS.

In this subchapter:

(1) BARTON SPRINGS means the springs that comprise the Barton Springs complex associated with Barton Springs Pool, and includes Upper Barton, Old Mill, Eliza, and Parthenia springs

(2) BLUFF means [~~is limited to a bluff with~~] a vertical change in elevation of more than 40 feet and an average gradient greater than 400 percent.

(3) [~~(2)~~] CANYON RIMROCK means [~~is limited to a rimrock with~~] a rock substrate that:

(a) has a gradient that exceeds 60 percent for a vertical distance of at least four feet; and

(b) is exposed for at least 50 feet horizontally along the rim of the canyon.

(4) [~~(3)~~] COMMERCIAL DEVELOPMENT means all development other than open space and residential development.

(5) CLUSTER HOUSING means a residential housing development that maximizes common open space by grouping housing units to minimize individual yards and has a maximum lot area of fifteen thousand (15,000) square feet for detached residential development.

[~~(4) CREST OF BLUFF is limited to a crest of a bluff that is described in Subsection (1). A crest coincides with a line along the top of a bluff beyond which the average slope has a gradient of not more than 50 percent for a distance of at least 40 feet.~~]

(6)[~~(5)~~] CRITICAL ENVIRONMENTAL FEATURES means [~~are~~] features that are of critical importance to the protection of environmental resources, and includes [~~include~~] bluffs, canyon rimrocks, caves, faults and fractures, seeps, sinkholes, springs, and wetlands.

(7) DIRECTOR, when used without a qualifier, means the director of the Planning and Development Review Department, or the director's designee.

(8) EROSION HAZARD ZONE means an area where future stream channel erosion is predicted to result in damage to or loss of property, buildings, infrastructure, utilities, or other valued resources.

[~~(6) IMPERVIOUS COVER means roads, parking areas, buildings, swimming pools, rooftop landscapes and other impermeable construction covering the natural land surface.~~]

(9) [~~(7)~~] FAULTS AND FRACTURES means [~~is limited to~~] significant fissures or cracks in rock that may permit infiltration of surface water to underground cavities or channels.

(10) IMPERVIOUS COVER means the total area of any surface that prevents the infiltration of water into the ground, such as roads, parking areas, concrete, and buildings.

(11) MULTI-USE TRAIL means a facility designated for the [~~shared~~] use of pedestrians, bicycles, and/or other non-motorized users and associated bridges.

(12) OPEN SPACE means a public or private park, multi-use trail, golf cart path, the portions of a golf course left in a natural state, and an area intended for outdoor

C3/112

activities which does not significantly alter the existing natural vegetation, drainage patterns, or increase erosion. Open space does not include parking lots.

(13)([~~8~~)] OWNER includes a lessee.

(14)[(~~9~~)] POINT RECHARGE FEATURE means a cave, sinkhole, fault, joint, or other natural feature that lies over the Edwards Aquifer recharge zone and that may transmit a significant amount of surface water into the subsurface strata.

(15)[(~~10~~)] WATER QUALITY CONTROL means a structure, system, or feature that provides water quality benefits by treating stormwater run-off.

(16)[(~~11~~)] WETLAND means a transitional land between terrestrial and aquatic systems where the water table is usually at or near the surface or the land is covered by shallow water, and conforms to the Army Corps of Engineers' definition.

PART 82. City Code Section 30-5-2 (*Descriptions of Regulated Areas*) is amended to read:

§ 30-5-2 DESCRIPTIONS OF REGULATED AREAS.

(A) This section describes the watersheds, aquifers, and water zones that are regulated by this subchapter. A map of these areas is maintained by the Watershed Protection Department and available for inspection at the offices of the single office.

(B) [~~Except as provided in Subsection (C), the~~] The Watershed Protection Department [~~single office~~] shall determine the boundaries of the areas described in Subsection (D).

(C) [~~The council and commissioners court, acting jointly, shall determine the boundaries of the Edwards Aquifer recharge zone after receiving a recommendation from the single office.~~] For property within 1500 feet of a boundary, the Watershed Protection Department [~~single office~~] may require that an applicant provide a certified report from a geologist or hydrologist verifying the boundary location.

(D) In this subchapter:

(1) BARTON SPRINGS ZONE means the Barton Creek watershed and all watersheds that contribute recharge to Barton Springs, including those portions of the [~~Barton,~~] Williamson, Slaughter, Onion, Bear and Little Bear Creek watershed located in the Edwards Aquifer recharge or contributing zones.

(2) BARTON CREEK WATERSHED means the land area that drains to Barton Creek including Little Barton Creek watershed.

(3) EDWARDS AQUIFER is the water-bearing substrata that [~~also known as the Edwards and Associated Limestones Aquifer and~~] includes the stratigraphic rock units known as the Edwards Group [~~Formation~~] and Georgetown Formation.

(4) EDWARDS AQUIFER CONTRIBUTING ZONE means all land generally to the west and upstream of the Edwards Aquifer recharge zone that provides drainage into the Edwards Aquifer recharge zone.

(5) EDWARDS AQUIFER RECHARGE ZONE means all land over the Edwards Aquifer that recharges the aquifer, as determined by the surface exposure of the

geologic units comprising the Edwards Aquifer, including the areas overlain with quaternary terrace deposits.

(6) SOUTH EDWARDS AQUIFER RECHARGE ZONE means the portion of the Edwards Aquifer recharge zone that is located south of the Colorado River and north of the Blanco River.

(7) SUBURBAN WATERSHEDS include all watersheds not otherwise classified as urban, water supply suburban, or water supply rural watersheds, and include:

(a) the Brushy, Buttercup, Carson, Cedar, Cottonmouth, Country Club, Decker, Dry Creek East [~~Dry~~], Elm Creek South, Gilleland, Harris Branch, Lake, Maha, Marble, North Fork Dry, Plum, Rattan, Rinard, South Boggy, South Fork Dry, South Brushy, Walnut, and Wilbarger creek watersheds;

(b) the Colorado River watershed downstream of U.S. 183; and

(c) those portions of the Onion, Bear, Little Bear, Slaughter, and Williamson creek watersheds not located in the Edwards Aquifer recharge or contributing zones.

(8) URBAN WATERSHEDS include:

(a) the Blunn, Buttermilk, East Boggy, East Bouldin, Fort, Harper Branch, Johnson, Little Walnut, Shoal, Tannehill, Waller, and West Bouldin creek watersheds;

(b) the north side of the Colorado River watershed from Johnson Creek to U.S. 183; and

(c) the south side of the Colorado River watershed from Barton Creek to U.S. 183.

(9) WATER SUPPLY RURAL WATERSHEDS include:

(a) the Lake Travis watershed;

(b)[~~and~~]the Lake Austin watershed, excluding the Bull Creek watershed and the area to the south of Bull Creek and the east of Lake Austin; and

(c) the Bear West, Bee, Bohl's Hollow, Cedar Hollow, Coldwater, Commons Ford, Cpnnors, Cuernavaca, Harrison Hollow, Hog Pen, Honey, Little Bee, Panther Hollow, Running Deer, St. Stephens, Steiner, and Turkey Creek watersheds.

(10) WATER SUPPLY SUBURBAN WATERSHEDS include:

(a) the Bull, Eanes, Dry Creek North [~~Dry~~], Huck's Slough, Taylor Slough North, Taylor Slough South, and West Bull creek watersheds;

(b) the Lady Bird [~~Town~~] Lake watershed on the south side of Lady Bird [~~Town~~] Lake from Barton Creek to Tom Miller Dam;

(c) the Lady Bird [~~Town~~] Lake watershed on the north side of Lady Bird [~~Town~~] Lake from Johnson Creek to Tom Miller Dam; and

(d) the Lady Bird [~~Town~~] Lake watershed on the east side of Lake Austin from Tom Miller Dam to Bull Creek.

PART 83. City Code Section 30-5-22 (*Urban Watershed Exemptions*) is deleted in its entirety.

C3/114

PART 84. A new City Code Section 30-5-22 is added to read:

§ 30-5-22 APPLICABILITY.

This subchapter applies to a preliminary plan, final plat, or subdivision construction plan outside the city's zoning jurisdiction and inside the portion of the city's extraterritorial jurisdiction that is within Travis County.

PART 85. City Code Section 30-5-23 (*Special* Exceptions) is amended to read:

§ 30-5-23 SPECIAL EXCEPTIONS.

Except as prohibited by Article 13[~~12~~] *(Save Our Springs Initiative)*, a special exception from the requirements of this subchapter may be granted in accordance with Chapter 30-1, Article 9, Division 4 *(Special Exceptions)*.

PART 86. City Code Section 30-5-24(*Redevelopment Exception*) is deleted in its entirety.

PART 87. City Code Section 30-5-41 (*Land Use Commission Variances*) is amended to read:

§ 30-5-41 LAND USE COMMISSION VARIANCES.

(A) It is the applicant's burden to establish that the findings described in this Section have been met. Except as provided in Subsections (B) and (C), the land use commission may grant a variance from a requirement of this subchapter after determining that:

(1) the requirement will deprive the applicant of a privilege or the safety of property given to owners of other similarly situated property with approximately contemporaneous development;

(2) the variance:

(a) is not based on a condition caused by the method chosen by the applicant to develop the property, unless the development method provides greater overall environmental protection that is achievable without the variance;

(b) is the minimum change necessary to avoid the deprivation of a privilege given to other property owners and to allow a reasonable use of the property; and

(c) does not create a significant probability of harmful environmental consequences; and

(3) development with the variance will result in water quality that is at least equal to the water quality achievable without the variance.

(B) The land use commission may grant a variance from a requirement of [~~Section 30-5-393 *(Water Quality Transition Zone)*,~~] Section 30-5-422 [~~423~~] *(Water Quality Transition Zone)*, Section 30-5-452[453] *(Water Quality Transition Zone)*, or Article 7, Division 1 *(Critical Water Quality Zone Restrictions)* after determining that:

(1) the criteria for granting a variance in Subsection (A) are met;

C3/115

(2) the requirement for which a variance is requested prevents a reasonable, economic use of the entire property; and

(3) the variance is the minimum change necessary to allow a reasonable, economic use of the entire property.

(C) The land use commission may not grant a variance from a requirement of Article 13[~~12~~] *(Save Our Springs Initiative)*.

(D) The land use commission shall prepare written findings of fact to support the grant or denial of a variance request under this section.

PART 88. City Code Section 30-5-42 (*Administrative Variances*) is amended to read:

§ 30-5-42 ADMINISTRATIVE VARIANCES.

(A) A variance under this section may not vary the requirements of Article 13 [~~12~~] *Save Our Springs Initiative)*.

(B) The Watershed Protection Department director may grant a variance from a requirement of:

(1) Section 30-5-261 (*Critical Water Quality Zone Development*), only if:

(a) necessary to protect public health and safety, or if it would provide a significant, demonstrable environmental benefit, as determined by a functional assessment of floodplain health as prescribed by the Environmental Criteria Manual,

(b) necessary to allow an athletic field in existence on {*the effective date of this ordinance*} to be maintained, improved, or replaced ,

(c) necessary to allow an athletic field to be located in an area not otherwise allowed under Section 30-5-261 (B) (5), or

(d) necessary to allow a hard surfaced trail to be located in an area not otherwise allowed under Section 30-5-261(B) (3);

(2) Section 30-5-261 (*Critical Water Quality Zone Development*), for development within an urban watershed, only if the proposed development:

(a) is located not less than 25 feet from the centerline of a waterway,

(b) is located outside the erosion hazard zone, unless protective works are provided as prescribed in the Drainage Criteria Manual,

(c) does not increase non-compliance, if any, with Article 7, Division I (*Critical Water Quality Zone Restrictions*), Section 30-5-281 (*Critical Environmental Features*) or Section 30-5-282 (*Wetland Protection*), and

(d) restores native vegetation and soils if development is removed from the Critical Water Quality Zone;

(3) Subsection 30-5-262 (B) (*Critical Water Quality Zone Street Crossings*), only outside the Barton Springs Zone;

(4) Section 30-5-281 (*Critical Environmental Features*);

[~~Subsection 30-5-423(C) (*Water Quality Transition Zone*);~~]

(5) (~~2~~) Section 30-5-322 *(Clearing For A Roadway)*;

C3/116

[~~(3) Subsection 30-5-343(A) *(Spoil Disposal)*;~~

~~(4) Article 7, Division 1 *(Critical Water Quality Zone Restrictions)*;~~]

(6)[~~(5)~~] Section 30-5-341 *(Cut Requirements)* or Section 30-5-342 *(Fill Requirements)*, for a water quality control or detention facility and appurtenances for conveyance such as swales, drainage ditches, and diversion berms; [~~or~~]

(7)[~~(6)~~] Section 30-5-341 *(Cut Requirements)* or Section 30-5-342 *(Fill Requirements)*, for a cut or fill of not more than eight feet in the desired development zone;

(8) Subsection 30-5-343(A) (*Spoil Disposal*);

(9) Section 30-5-365 (*Interbasin Diversion*).

(C) It is the applicant's burden to establish that the findings described in this Section have been met.

(D) The Watershed Protection Department director may grant a variance described in Subsection (B) only after determining that ~~[:~~

~~(1)~~]development in accordance with the variance meets the objective of the requirement for which the variance is requested[~~;~~] and:

(1) [~~(2)~~] for property in the Barton Springs Zone, the variance will result in water quality that is at least equal to the water quality achievable without the variance; [~~and~~]

(2) for a variance from Section 30-5-261 (B) (5), that the proposed work on or placement of the athletic field will have no adverse environmental impacts;

(3) for a variance from Section 30-5-281, that the proposed measures preserve all characteristics of the critical environmental feature;

(4) for a variance from Section 30-5-341 or Section 30-5-342 [~~described in Paragraph (B)(6)~~], the cut or fill is not located on a slope with a gradient of more than 15 percent or within 100 feet of a classified waterway;

(5) for a variance from Section 30-5-343(A), use of the spoil provides a necessary public benefit. Necessary public benefits include:

(a) roadways;

(b) stormwater detention facilities;

(c) public or private park sites; and

(d) building sites that comply with Section 30-5-341 (*Cut Requirements*), Section 30-5-342 (*Fill Requirements*), and Chapter 30-4(*Drainage*); and

(6) for a variance from Section 30-5-365, there are no adverse environmental or drainage impacts.

(E) [~~(D)~~] The Watershed Protection Department director shall prepare written findings to support the grant or denial of a variance request under this section.

PART 89. City Code Section 30-5-62 (*Net Site Area*) is amended to add a new Subsection (C) to read:

(C) Net site area does not apply in the urban or suburban watersheds.

C3/117

PART 90. City Code Section 30-5-63 (*Impervious Cover Calculations*) is amended to read:

§ 30-5-63 IMPERVIOUS COVER CALCULATIONS.

(A) Impervious cover is calculated in accordance with this Section and the Environmental Criteria Manual.

(B) Impervious cover calculations include:

(1) roads;

(2) driveways;

(3) parking areas;

(4) buildings;

(5) concrete;

(6) impermeable construction covering the natural land surface;

(7) for an uncovered wood deck that has drainage spaces between the deck boards and that is located over a pervious surface, 50 percent of the horizontal area of the deck; and

(8) [~~interlocking or permeable pavers, except up to 20 percent of the area of the pavers may be excluded in calculating impervious cover if the pavers are approved by the director for recharge enhancement under Section 30-5-151 *(Innovative-Management Practices)*; and~~

~~(9)~~]the portion of a site used for the storage of scrap and metal salvage, including auto salvage.

(C) Impervious cover calculations exclude:

(1) sidewalks in a public right-of-way or public easement;

(2) multi-use trails open to the public and located on public land or in a public easement;

(3) water quality controls, excluding subsurface water quality controls;

(4) detention basins, excluding subsurface detention basins;

(5)[~~(3)~~] drainage swales and conveyances;

(6)[~~(4)~~] ponds, pools, and fountains; [~~and~~]

(7) [~~(5)~~] areas with gravel placed over pervious surfaces that are used only for landscaping or by pedestrians and are not constructed with compacted base;

(8) porous pavement designed in accordance with the Environmental Criteria Manual, limited to only pedestrian walkways and multi-use trails, and located outside the Edwards Aquifer Recharge Zone;

(9) fire lanes designed as prescribed by the Environmental Criteria Manual, that consist of interlocking pavers, and are restricted from routine vehicle access; and

(10) a subsurface portion of a parking structure if the director of the Watershed Protection Department determines that:

(a) the subsurface portion of the structure:

(i) is located within an urban or suburban watershed;

C3/118

(ii)is below the grade of the land that existed before construction of the structure;

(iii)is covered by soil with a minimum depth of two feet and an average depth of not less than four feet; and

(iv)has an area not greater than fifteen percent of the site;

(b) the structure is not associated with a use regulated by Section 1.2.2 of Subchapter F of Chapter 25-2 (*Residential Design and Compatibility Standards*);

(c) the applicant submits an assessment of the presence and depth of groundwater at the site sufficient to determine whether groundwater will need to be discharged or impounded; and

(d) the applicant submits documentation that the discharge or impoundment of groundwater from the structure, if any, will be managed to avoid adverse effects on public health and safety, the environment, and adjacent property.

PART 91 City Code Section 30-5-65 (*Roadways*) is deleted in its entirety.

PART 92. A new City Code Section 30-5-65 is added to read:

§ 30-5-65 COMMERCIAL IMPERVIOUS COVER

(A) This section applies to impervious cover calculations for commercial developments.

(B) An application for a commercial development must demonstrate that once fully constructed, the development will not exceed applicable maximum impervious cover limitations.

(C) Subsection (B) does not apply to an application for a commercial site development, including a roadway project, that will not exceed 5,000 square feet of new impervious cover. For the purposes of this Section, roadway improvements are limited to intersection upgrades, low-water crossing upgrades, additions for bicycle lanes, and additions for mass transit stops.

PART 93. City Code Section 30-5-91 (*Waterway Classifications*) is amended to read:

§ 30-5-91 WATERWAY CLASSIFICATIONS.

(A) This section classifies [~~the significant~~] waterways [~~in each watershed~~] according to drainage area.

(B) In all watersheds except urban[~~a suburban watershed~~]:

(1) a minor waterway has a drainage area of at least 64 [~~320~~] acres and not more than 320 [~~640~~] acres;

(2) an intermediate waterway has a drainage area of more than 320[~~640~~] acres and not more than 640 [~~1280~~] acres; and

(3) a major waterway has a drainage area of more than 640 [~~1280~~] acres.

C3/119

[~~(C) In a water supply suburban watershed:~~

~~(1) a minor waterway has a drainage area of at least 128 acres and not more than 320 acres;~~

~~(2) an intermediate waterway has a drainage area of more than 320 acres and not more than 640 acres; and~~

~~(3) a major waterway has a drainage area of more than 640 acres.~~

~~(D) In a water supply rural watershed:~~

~~(1) a minor waterway has a drainage area of at least 64 acres and not more than 320 acres;~~

~~(2) an intermediate waterway has a drainage area of more than 320 acres and not more than 640 acres; and~~

~~(3) a major waterway has a drainage area of more than 640 acres.~~

~~(E) In the Barton Springs Zone:~~

~~(1) for the Barton Creek, Bear Creek, Little Barton Creek, Little Bear Creek, and Onion Creek watersheds:~~

~~(a) a minor waterway has a drainage area of at least 64 acres and not more than 320 acres;~~

~~(b) an intermediate waterway has a drainage area of more than 320 acres and not more than 640 acres; and~~

~~(c) a major waterway has a drainage area of more than 640 acres; and~~

~~(2) for the Slaughter Creek and Williamson Creek watersheds:~~

~~(a) a minor waterway has a drainage area of at least 128 acres and not more than 320 acres;~~

~~(b) an intermediate waterway has a drainage area of more than 320 acres and not more than 640 acres; and~~

~~(c) a major waterway has a drainage area of more than 640 acres.~~]

PART 94. City Code Section 30-5-92 (*Critical Water Quality Zones Established*) is amended to read:

§ 30-5-92 CRITICAL WATER QUALITY ZONES ESTABLISHED.

(A) In the water supply rural watersheds, water supply suburban watersheds, and Barton Springs zone, a [~~A~~] critical water quality zone is established along each waterway classified under Section 30-5-91 *(Waterway Classifications)*.

(1) The boundaries of a critical water quality zone coincide with the boundaries of the 100 year flood plain calculated under fully developed conditions as prescribed by the Drainage Criteria Manual, except:

(a) [~~(2)~~] for a minor waterway, the boundaries of the critical water quality zone are located not less than 50 feet and not more than 100 feet from the centerline of the waterway;

(b) [~~(a)~~] for an intermediate waterway, the boundaries of the critical water quality zone are located not less than 100 feet and not more than 200 feet from the centerline of the waterway;

(c) [~~(b)~~] for a major waterway, the boundaries of the critical water quality zone are located not less than 200 feet and not more than 400 feet from the centerline of the waterway; and

(d) [~~(c)~~] for the main channel of Barton Creek, the boundaries of the critical water quality zone are located 400 feet from the centerline of the creek.

(2) [~~(3)~~] Notwithstanding the provisions of Subsections (A) (1)[~~(2)~~](a), (b), and (c), a critical water quality zone does not apply to a previously modified drainage feature serving a public roadway right of way that does not possess any natural and traditional character and cannot reasonably be restored to a natural condition[~~extend beyond the crest of a bluff~~].

(B) In the suburban watersheds, a critical water quality zone is established along each waterway classified under Section 30-5-91 (*Waterway Classifications*).

(1) for a minor waterway, the boundaries of the critical water quality zone are located 100 feet from the centerline of the waterway;

(2) for an intermediate waterway, the boundaries of the critical water quality zone are located 200 feet from the centerline of the waterway; and

(3) for a major waterway, the boundaries of the critical water quality zone are located 300 feet from the centerline of the waterway;

(4) The critical water quality zone boundaries may be reduced to not less than 50 feet from the centerline of a minor waterway, 100 feet from the centerline of an intermediate waterway, and 150 feet from the centerline of a major waterway if the overall surface area of the critical water quality zone is the same or greater than the surface area that would be provided without the reduction, as prescribed in the Environmental Criteria Manual.

(5) Notwithstanding the provisions of Subsections (B) (1), (2), and (3), a critical water quality zone does not apply to a previously modified drainage feature serving a public roadway right of way that does not possess any natural and traditional character and cannot reasonably be restored to a natural condition.

(C) Critical water quality zones are established to include the inundated areas that constitute Lake Walter E. Long, Lake Austin, Lady Bird Lake, and the Colorado River downstream of Lady Bird Lake.

(D) [~~(B)~~] Critical water quality zones are established along and parallel to the shorelines of Lake Travis, Lake Austin, and Lady Bird [~~Town~~] Lake.

(1) The shoreline boundary of a critical water quality zone:

(a) for Lake Travis, coincides with the 681.0 foot contour line;

(b) for Lake Austin, coincides with the 492.8 foot contour line; and

(c) for Lady Bird [~~Town~~] Lake, coincides with the 429.0 foot contour line.

(2) The width of a critical water quality zone, measured horizontally inland, is:

(C3/12)

(a) 100 feet; or

(b) for a detached single-family residential use, 75 feet.

(E) [~~(C)~~] Critical water quality zones are established along and parallel to the shorelines of the Colorado River downstream of Lady Bird [~~Town~~] Lake.

(1) The shoreline boundary of a critical water quality zone coincides with the river's ordinary high water mark, as defined by Code of Federal Regulations Title 33, Section 328.3 (*Definitions*).

(2) The inland boundary of a critical waterquality zone coincides with the boundary of the 100-year floodplain as delineated by the Federal Emergency Management Agency, except that the width of the critical water quality zone,measured horizontally inland, isnot less than 200 feet and not morethan 400 feet.

(F) [~~(D)~~] In an urban watershed, a critical water quality zone is established along each waterway with a drainage area of at least 64 acres. This does not apply in the area bounded by IH-35, Riverside Drive, Barton Springs Road, Lamar Boulevard, and 15th Street.

(1) The boundaries of the critical water quality zone coincide with the boundaries of the 100 year floodplain calculated under fully developed conditions as prescribed by the Drainage Criteria Manual; provided that the boundary is not less than 50 feet and not more than 400 feet from the centerline of the waterway.

(2) Notwithstanding the provisions of Subsection (F) (1), a critical water quality zone does not apply to a previously modified drainage feature serving a public roadway right of way that does not possess any natural and traditional character and cannot reasonably be restored to a natural condition. [~~Except as limited by Paragraph (3), for a waterway whose 100-year flood plain has been delineated by the Federal Emergency Management Agency:~~

~~(a) the boundaries of the critical water quality zone coincide with the boundaries of the floodplain as delineated by FEMA; or~~

~~(b) if the applicant has calculated the 100-year flood plain for the waterway and the city has approved the calculations, the boundaries of the critical water quality zone coincide with the boundaries of the calculated flood plain.~~

~~(2) Except as limited by Paragraph (3), for a waterway whose 100-year flood plain has not been delineated by the Federal Emergency Management Agency:~~

~~(a) the boundaries of a critical water quality zone are located 100 feet from the centerline of the waterway; or~~

~~(b) if the applicant has calculated the 100-year flood plain for the waterway and the city has approved the calculations, the boundaries of the critical water quality zone coincide with are the lesser of the boundaries of the calculated flood plain.~~

~~(3) The boundaries of a critical water quality zone are located not less than 50 feet and not more than 400 feet from the centerline of the waterway.~~]

C3
122

PART 95. City Code Section 30-5-93 (*Water Quality Transition Zones Established*), Subsection (A) is amended to read:

(A) In the water supply rural watersheds, water supply suburban watersheds, and in the Barton Springs zone, excluding [~~Except for~~] Lake Austin, Lake Travis, and Lady Bird [~~Town~~] Lake, a water quality transition zone is established adjacent and parallel to the outer boundary of each critical water quality zone.

PART 96. The title of City Code Chapter 30-5, Subchapter A, Article 3 is amended to read:

ARTICLE 3. ENVIRONMENTAL RESOURCE INVENTORY [~~ASSESSMENT~~]; POLLUTANT ATTENUATION PLAN.

PART 97. City Code Section 30-5-121 (*Environmental Assessment Requirement*) is amended to read:

§ 30-5-121 ENVIRONMENTAL RESOURCE INVENTORY [~~ASSESSMENT~~] REQUIREMENT.

(A) An applicant shall file an environmental resource inventory [~~assessment~~] with the [~~single office~~] Watershed Protection Department for proposed development located:

(1) over a karst aquifer;

(2) within an area draining to a karst aquifer or reservoir;

(3) in a water quality transition zone;

(4) in a critical water quality zone;

(5) in a floodplain [~~flood plain~~]; or

(6) on a tract with a gradient of more than 15 percent.

(B) An environmental resource inventory [~~assessment~~] must:

(1) identify critical environmental features and propose protection measures for the features;

(2) provide an environmental justification for spoil disposal locations or roadway alignments;

(3) propose methods to achieve overland flow[~~and justify enclosed storm sewers; and~~];

(4) describe proposed industrial uses and the pollution abatement program; and

(5) be completed as prescribed by the Environmental Criteria Manual.

(C) An environmental resource inventory [~~assessment~~] must include:

(1) a hydrogeologic report in accordance with Section 30-5-122*(Hydrogeologic Report)*;

(2) a vegetation report in accordance with Section 30-5-123 *(Vegetation Report)*; and

(3) a wastewater report in accordance with Section 30-5-124*(Wastewater Report)*.

C3
123

(D) The Watershed Protection Department director [~~single office~~] may permit an applicant to exclude from an environmental resource inventory [~~assessment~~] information required by this section after determining that the information is unnecessary because of the scope and nature of the proposed development.

PART 98. City Code Section 30-5-122 (*Hydrogeologic Report*) is amended to read:

§ 30-5-122 HYDROGEOLOGIC REPORT.

A hydrogeologic report must:

(1) generally describe the topography, soils, and geology of the site;

(2) identify springs and significant point recharge features on the site; [~~and~~]

(3) demonstrate that proposed drainage patterns will protect the quality and quantity of recharge at significant point recharge features; and[.]

(4) identify all recorded and unrecorded water wells, both on the site and within 150 feet of the boundary of the site.

PART 99. City Code Section 30-5-125 (*Pollutant Attenuation Plan*) is amended to read:

§ 30-5-125 POLLUTANT ATTENUATION PLAN.

An applicant proposing an industrial use that is not completely enclosed in a building shall provide a pollutant attenuation plan in accordance with the [~~Administrative and the~~] Environmental Criteria Manual [~~Manuals~~].

PART 100. City Code Section 30-5-151 (*Innovative Management Practices*) is amended to read:

§ 30-5-151 INNOVATIVE MANAGEMENT PRACTICES.

(A) An innovative water quality control is a practice that is not specifically prescribed in the Environmental Criteria Manual, but is designed to address the requirements of Article 6 (*Water Quality Controls*).

(B) [~~(A)~~] An innovative runoff management practice is a practice that is designed to address the requirements of [~~Article 6 (Water Quality Controls) and~~] Section 30-5-281 *(Critical Environmental Features)*, enhance the recharge of groundwater and the discharge of springs, and maintain the function of critical environmental features. [~~The city and county encourage innovative management practices.~~]

(C) A proposal for an [~~An~~] innovative water quality control or runoff management practice [~~proposal~~] must be reviewed and approved by the Watershed Protection Department director. Review and approval is based on:

(1) technical merit;

(2) compliance with the requirements of this title for water quality protection and improvement;

(3) resource protection and improvement;

C3
124

(4) advantages over standard practices; and
(5) anticipated maintenance requirements.

PART 101. City Code Section 30-5-185 (*Overland Flow*) is amended to read:

§ 30-5-185 OVERLAND FLOW.

(A) Drainage patterns must be designed to:
(1) prevent erosion;
(2) maintain infiltration and recharge of local seeps and springs;
(3) attenuate the harm of contaminants collected and transported by stormwater; and
(4) where possible, maintain and restore overland sheet flow, maintain natural drainage features and patterns, and disperse runoff back to sheet flow.

~~[(B) Construction of an enclosed storm sewer or an impervious channel lining is prohibited unless the single office determines, based on engineering evidence, that an enclosed storm sewers or impervious channel lining is the preferred option. A conflict between the requirements of this subsection and another requirement of this title may be resolved by an appeal to the land use commission.]~~

(B) [~~(C)~~] The applicant shall design an enclosed storm drain [~~sewer~~] to mitigate potential adverse impacts [~~its harmful effect~~] on water quality by using [~~structural devices or other~~] methods to prevent erosion and dissipate discharges from outlets. Applicant shall locate [~~wherever practicable, and by locating~~] discharges to maximize overland flow through buffer zones or grass-lined swales wherever practicable.

PART 102. City Code Section 30-5-211 (*Water Quality Control Requirement*) is amended to read:

§ 30-5-211 WATER QUALITY CONTROL REQUIREMENT.

(A) In the Barton Springs Zone, water quality controls are required for all development.

(B) In a watershed other than a Barton Springs Zone watershed, water quality controls are required for development:
(1) located in the water quality transition zone;
(2) of a golf course, play field, or similar recreational use, if fertilizer, herbicide, or pesticide is applied; or
(3) if the total of new and redeveloped impervious cover exceeds 5,000 square feet[~~except as provided in Subsection (C), with impervious cover that exceeds 20 percent of net site area~~].

(C) [~~In an urban watershed:~~
~~(1) water quality controls are required in accordance with the Environmental Criteria Manual; and~~
~~(2)~~] All new development must provide for removal of floating debris from stormwater runoff.

(D) The water quality control requirements in this division do not require water quality controls on a single-family or duplex lot but apply to the residential subdivision as a whole.

(E)The water quality control requirements in this division do not require water quality controls for a roadway project with less than 5,000 square feet of new impervious cover. For the purposes of this Section, roadway improvements are limited to intersection upgrades, low-water crossing upgrades, additions for bicycle lanes, and additions for mass transit stops.

PART 103. City Code Section 30-5-213 (*Water Quality Control Standards*) is amended to read:

§ 30-5-213 WATER QUALITY CONTROL STANDARDS.

(A) A water quality control must be designed in accordance with the Environmental Criteria Manual.

(1) The control must provide at least the treatment level of a sedimentation/filtration system under the Environmental Criteria Manual.

(2) An impervious liner is required in an area where there is surface runoff to groundwater conductivity. If a liner is required and controls are located in series, liners are not required for the second or later in the series following sedimentation, extended detention, or sedimentation/filtration.

(3) The control must be accessible for maintenance and inspection as prescribed in the Environmental Criteria Manual.

(B) A water quality control must capture[~~, isolate,~~] and treat the water draining to the control from the contributing area. The required capture volume is:

(1) the first one-half inch of runoff; and

(2) for each 10 percent increase in impervious cover over 20 percent of gross site area, an additional one-tenth of an inch of runoff.

(C) The location of a water quality control:

(1) must avoid recharge features to the greatest extent possible;

(2) must be shown on the slope map, preliminary plan, site plan, or subdivision construction plan, as applicable; and

(3) in a water supply rural watershed, may not be in the 40 percent buffer zone, unless the control disturbs less than 50% of the buffer, and is located to maximize overland flow and recharge in the undisturbed remainder of the 40 percent buffer zone.

(D) This subsection provides additional requirements for the Barton Springs Zone.

(1) Approval by the Watershed Protection Department director is required for a proposed water quality control that is not described in the Environmental Criteria Manual. The applicant must substantiate the pollutant removal efficiency of the proposed control with published literature or a verifiable engineering study.

(2) Water quality controls must be placed in sequence if necessary to remove the required amount of pollutant. The sequence of controls must be:

C3/126

(a) based on the Environmental Criteria Manual or generally accepted engineering principles; and

(b) designed to minimize maintenance requirements.

PART 104 City Code Section 30-5-214 (*Optional Payment Instead of Structural Controls in Urban Watersheds*) is amended to read:

§ 30-5-214 OPTIONAL PAYMENT INSTEAD OF STRUCTURAL CONTROLS IN URBAN WATERSHEDS.

(A) The Watershed Protection Department director shall identify and prioritize water quality control facilities for the urban watersheds in an Urban Watersheds Structural Control Plan. The Environmental Board shall review the plan in January of each year.

(B) An Urban Watersheds Structural Control Fund is established for use in the design and construction of water quality control facilities in the urban watersheds.

(C) Instead of providing the water quality controls required under Section 30-5-211 *(Water Quality Control Requirement)*, in an urban watershed a developer may request approval to deposit with the city a nonrefundable cash payment, based on a formula established by the council. The Watershed Protection Department director shall review the request and accept or deny the request based on standards in the Environmental Criteria Manual[~~not later than the 15th working day after its receipt~~].

(D) The Watershed Protection Department director shall deposit a payment made under this section in the Urban Watersheds Structural Control Fund.

PART 105. City Code Section 30-5-231 (*Water Quality Control Maintenance and Inspection*), Subsections (D) through (H) are amended to read:

(D) The Watershed Protection Department director may authorize an alternative arrangement for maintenance of a residential or commercial pond [~~basin~~] in accordance with the Environmental Criteria Manual [~~DCM~~] standards. If an alternative arrangement is approved by the director, the city attorney shall determine whether an agreement is necessary; the agreement must be approved by the city attorney and filed of record.

(E) The City shall inspect each commercial pond that is not a subsurface pond at least once every three years to ensure that the commercial pond is being maintained in accordance with the ECM standards. If the commercial pond fails inspection requiring an additional inspection, the Watershed Protection Department director may charge a re-inspection fee.

(F)The record owner of a subsurface commercial pond must provide the Watershed Protection Department with a maintenance plan and an annual report from a registered engineer verifying that the pond is in proper operating condition.

(G) [~~(F)~~] Until the City accepts a residential pond for maintenance, the record owner(s) of the residential pond and the residential development served shall maintain the residential pond in accordance with the ECM standards.

(H) [~~(G)~~] The City shall be responsible for maintenance of a residential pond only after the residential pond has been accepted for maintenance by the City. The City will accept the residential pond upon determining that it meets the requirements of the Environmental Criteria Manual and, if applicable, Section 25-8-234 *(Fiscal Security in the Barton Springs Zone)*.

PART 106. City Code Section 30-5-232 (*Dedicated Fund*), Subsection (C) is amended to read:

(C) The Watershed Protection Department director shall administer the fund, allocate the fund for appropriate projects, and report annually to the council regarding the status of the fund and the monitoring and maintenance program described in this section.

PART 107. City Code Section 30-5-233 (*Barton Springs Zone Operating Permit*) is amended to substitute the Planning and Development Review Department for the director.

PART 108. City Code Section 30-5-261 (*Critical Water Quality Zone Development*) is amended to read:

§ 30-5-261 CRITICAL WATER QUALITY ZONE DEVELOPMENT.

In all watersheds, development is prohibited in a critical water quality zone except as provided in this Division.

(A) A fence that does not obstruct flood flows is permitted in a critical water quality zone.

(B) Open space [~~A public or private park, golf course, or open spaces, other than a parking lot,~~] is permitted in a critical water quality zone if a program of fertilizer, pesticide, and herbicide use is approved by the Watershed Protection Department director, subject to the conditions in this Subsection.

(1) In a water supply rural watershed, water supply suburban watershed, or the Barton Springs Zone, open space [~~park development~~] is limited to sustainable urban agriculture or a community garden if the requirements in subsection (B) (4) are met, multi-use trails, picnic facilities,[~~hiking, jogging, or walking trails~~]and outdoor facilities, excluding [~~and excludes~~] stables, [~~and~~] corrals for animals, and athletic fields.

(2) A[~~In the Barton Springs Zone, a~~] master planned park that is [~~reviewed by the land use commission and~~] approved by the council may include recreational development other than that described in Subsection (B)(1).

(3) A hard surfaced trail that does not cross the critical water quality zone may be located within the critical water quality zone only if:

(a) designed in accordance with the Environmental Criteria Manual;

(b) located outside the erosion hazard zone, unless protective works are provided as prescribed in the Drainage Criteria Manual;

(c) limited to 12 feet in width unless a wider trail is designated in the Urban Trails Master Plan adopted by Council;

(d) located not less than 25 feet from the centerline of a waterway if within an urban watershed and not crossing the Critical Water Quality Zone; and

(e) located not less than 50 feet from the centerline of a minor waterway, 100 feet from the centerline of an intermediate waterway, and 150 feet from the centerline of a major waterway if within a watershed other than an urban watershed and not crossing the Critical Water Quality Zone.

(4) Open space may include sustainable urban agriculture or a community garden only if:

(a) in an urban watershed and located not less than 25 feet from the centerline of a waterway, or in a watershed other than an urban watershed and located not less than 50 feet from the centerline of a minor waterway, 100 feet from the centerline of an intermediate waterway, and 150 feet from the centerline of a major waterway;

(b) designed in accordance with the Environmental Criteria Manual; and

(c) limited to garden plots and paths, with no storage facilities or other structures over 500 square feet.

(5) In a suburban or urban watershed, open space may include an athletic field only if:

(a) the athletic field is in an urban watershed and located not less than 25 feet from the centerline of a waterway, or is in a suburban watershed and located not less than 50 feet from the centerline of a minor waterway, 100 feet from the centerline of an intermediate waterway, and 150 feet from the centerline of a major waterway; and

(b) the owner of the athletic field submits to the Watershed Protection Department a maintenance plan to keep the athletic field well vegetated and minimize compaction, as prescribed in the Environmental Criteria Manual.

(C) Along Lake Travis, Lake Austin, or Lady Bird [~~Town~~] Lake:

(1) a boat dock, pier, wharf, or marina and necessary access and appurtenances, is permitted in a critical water quality zone; and

(2) approval by the Watershed Protection Department director of chemicals used to treat building materials that will be submerged in water is required before a permit may be issued or a site plan released.

[~~(D) In the Barton Springs Zone:~~

~~(1) a boat dock, pier, wharf, or marina and necessary access and appurtenances, or a pedestrian bridge, or bicycle or golf cart path, is permitted in a critical water quality zone; and~~

~~(2) approval by the director of chemicals used to treat building materials that will be submerged in water is required before a permit may be issued or a site plan released.~~]

13/129

(D)[~~(E)~~] A utility line,including a storm drain, is prohibited in the critical water quality zone, except as provided in subsection (E) or for a necessary crossing. A necessary utility crossing may cross into or through a critical water quality zone only if:

(1) the utility line follows the most direct path into or across the critical water quality zone to minimize disturbance;

(2) the depth of the utility line and location of associated access shafts are not located within an erosion hazard zone, unless protective works are provided as prescribed in the Drainage Criteria Manual; and

(3) in [~~In~~] the Barton Springs Zone, is approved [~~approval~~] by the Watershed Protection Department director[~~is required for a utility line crossing~~].

(E) In the urban and suburban watersheds, a utility line may be located parallel to and within the critical water quality zone if:

(1) in an urban watershed and located not less than 50 feet from the centerline of a waterway, or in a watershed other than urban and located not less than 50 feet from the centerline of a minor waterway, 100 feet from the centerline of an intermediate waterway, and 150 feet from the centerline of a major waterway;

(2) designed in accordance with the Environmental Criteria Manual; and

(3) located outside the erosion hazard zone, unless protective works are provided as prescribed in the Drainage Criteria Manual.

(F) [~~Except in the Barton Springs Zone,~~] Detention [~~detention~~] basins and wet ponds [~~floodplain alterations~~] are prohibited [~~permitted~~] in the critical water quality zone unless [~~if~~] the requirements of Section 30-5-364 (*Floodplain Modification*),Chapter 30-4 (*Drainage*), and the other provisions of this subchapter are met.

(G) Floodplain modifications are prohibited in the critical water quality zone unless:

(1) the floodplain modifications proposed are necessary to protect the public health and safety;

(2) the floodplain modifications proposed would provide a significant, demonstrable environmental benefit, as determined by a functional assessment of floodplain health as prescribed by the Environmental Criteria Manual, or

(3) the floodplain modifications proposed are necessary for development allowed in the critical water quality zone under section 30-5-261 (*Critical Water Quality Zone Development*) or 30-5-262 (*Critical Water Quality Zone Street Crossings*).

(H) In the urban and suburban watersheds, vegetative filter strips, rain gardens, biofiltration ponds, areas used for irrigation or infiltration of stormwater, or other controls as prescribed by rule are allowed in the critical water quality zone if:

(1) in an urban watershed and located not less than 50 feet from the centerline of a waterway, or in a watershed other than urban and located no less than 50 feet from the centerline of a minor waterway, no less than 100 feet from the centerline of an intermediate waterway, and no less than 150 feet from the centerline of a major waterway;

C3/130

(2) located outside the 100 year floodplain; and

(3) located outside the erosion hazard zone, unless protective works are provided as prescribed in the Drainage Criteria Manual.

(I) A residential lot that is 5,750 square feet or less in size may not include any portion of a critical water quality zone.

(J) For the purposes of calculating the centerline of a waterway in an urban watershed under this Section, the waterway must have a drainage area of at least 64 acres and be located outside the area bounded by Interstate 35, Riverside Drive, Barton Springs Road, Lamar Boulevard, and 15th Street.

PART 109. City Code Section 30-5-262 (*Critical Water Quality Zone Street Crossings*) is amended by amending Subsection (C) and adding a new Subsection (D) to read:

(C) [~~Except in the Barton Springs Zone, the director may vary the requirements of Subsection (B).~~]In all watersheds, multi-use trails may cross a critical water quality zone of any waterway.

(D) Notwithstanding subsections (A) and (B) and except in the Barton Springs Zone, a street or driveway may cross the critical water quality zone if the street or driveway is located in a center or corridor as identified on the growth concept map of the Imagine Austin Comprehensive Plan, as adopted by Ordinance No. 20120614-058, and if the proposed crossing:

(1) is necessary to facilitate the development or redevelopment of a designated corridor or center as recommended in the Imagine Austin Comprehensive Plan, Chapter 4 (*Shaping Austin: Building the Complete Community*), growth concept map and related definitions; and

(2) maintains the quality and quantity of recharge if located in a center or corridor designated as a sensitive environmental area in the Edwards Aquifer recharge zone, Edwards Aquifer contributing zone, or the South Edwards Aquifer recharge zone, as determined by the Watershed Protection Department director.

PART 110. City Code Section 30-5-281 (*Critical Environmental Features*) is amended by amending Subsections (C) and (D) to read:

(C) This subsection prescribes the requirements for critical environmental feature buffer zones.

(1) A buffer zone is established around each critical environmental feature described in this subchapter.

(a) Except as provided in Subsection (C)(1)(b), the width of the buffer zone is 150 feet from the edge of the critical environmental feature.

(b) For a point recharge feature, the buffer zone coincides with the topographically defined catchment basin, except that the width of the buffer zone from the edge of the critical environmental feature is:

(i) not less than 150 feet; [~~and~~]

C3/131

(ii) not more than 300 feet; and

(iii) calculated in accordance with the Environmental Criteria Manual.

(2) Within a buffer zone described in this subsection:

(a) the natural vegetative cover must be retained to the maximum extent practicable;

(b) construction is prohibited; and

(c) wastewater disposal or irrigation is prohibited.

(3) If located at least 50 feet from the edge of the critical environmental feature, the prohibition of Subsection (C)(2)(b) does not apply to:

(a) a yard or hiking trail; or

(b) a recharge basin approved under Section 30-5-213 *(Water Quality Control Standards)* that discharges to a point recharge feature; or

(c) an innovative runoff management practice approved under Section 30-5-151 (*Innovative Management Practices*).

(4) Perimeter fencing with not less than one access gate must be installed at the outer edge of the buffer zone for all point recharge features. The fencing must comply with the Standard Specifications Manual.

(5) The owner must maintain the buffer zone in accordance with standards in the Environmental Criteria Manual to preserve the water quality function of the buffer.

(D) [~~The director may grant an administrative variance to a requirement of this section. An applicant for a variance must demonstrate that the proposed measures preserve all characteristics of the critical environmental feature.~~]When voids in the rock substrate are uncovered during development, the following protocol must be followed:

(1) construction in the area of the void must cease while the applicant conducts a preliminary investigation of the void as prescribed by the Environmental Criteria Manual.

(2) The applicant shall contact a City of Austin Environmental Inspector to schedule further investigation by the City of the void as prescribed by the Environmental Criteria Manual if the preliminary investigation indicates that the void:

(a) is at least one square foot in total area;

(b) blows air from within the substrate;

(c) consistently receives water during any rain event; or

(d) potentially transmits groundwater.

(3) Construction may only proceed after mitigation measures are reviewed and approved by the Watershed Protection Department.

PART 111. City Code Section 30-5-282 (*Wetland Protection*) is amended to read:

§ 30-5-282 WETLAND PROTECTION.

C3/132

(A) Wetlands must be protected in all watersheds except in the area bounded by Interstate 35, Riverside Drive, Barton Springs Road, Lamar Boulevard, and 15th Street [~~central business area~~].

(B) Protection methods for wetlands include:

(1) appropriate setbacks that preserve the wetlands or wetland functions;

(2) wetland mitigation, including wetland replacement;

(3) wetland restoration or enhancement; or

(4) use of a wetlands for water quality controls.

(C) The Watershed Protection Department director may approve:

(1) the removal and replacement of a wetland; or

(2) the elimination of setbacks from a wetland that is proposed to be used as a water quality control.

PART 112. City Code Section 30-5-302 (*Construction of a Building or Parking Area*), Subsection (B) is amended to read:

(B) A person may construct a building or parking structure on a slope with a gradient of more than 15 percent and not more than 25 percent if the requirements of this subsection are met.

(1) Impervious cover on slopes with a gradients of more than 15 percent may not exceed 10 percent of the total area of the slopes.

(2) The terracing techniques in the Environmental Criteria Manual are required for construction that is uphill or downhill of a slope with a gradient of more than 15 percent.

(3) Hillside vegetation may not be disturbed except as necessary for construction, and disturbed areas must be restored with native and adapted vegetation as prescribed in the Environmental Criteria Manual.

(4) For construction described in this section, a cut or fill must be revegetated, or if a cut or fill has a finished gradient of more than 33 percent, stabilized with a permanent structure. This does not apply to a stable cut.

PART 113. City Code Section 30-5-343 (*Spoil Disposal*) is amended by deleting Subsection (B) in its entirety and renumbering the remaining Subsections accordingly.

PART 114. City Code Section 30-5-361 (*Wastewater Restrictions*) is amended to read:

§ 30-5-361 WASTEWATER RESTRICTIONS.

(A) Wastewater treatment by land application is prohibited:

(1) on a slope with a gradient of more than 15 percent;

(2) in a critical water quality zone;

(3) in a 100-year floodplain;

(4) on the trunk of surveyed trees;

C3/33

(5) in the buffer zone established around a critical environmental feature under Section 30-5-281 (*Critical Environmental Features*); or

(6) during wet weather conditions.

(B) A lot in the Edwards Aquifer recharge zone with private on-site sewage facilities must demonstrate compliance with City Code Chapter 15-5 (*Private Sewage Facilities*).

~~[(A) A wastewater line is prohibited in a critical water quality zone, except for a necessary crossing.~~

~~(1) The land use commission may grant a variance to the prohibition of this subsection. An applicant for a variance must provide an environmental assessment evaluating the effects of alternative sewer alignments.~~

~~(2) Except for a necessary crossing, a wastewater line in a critical water quality zone must be located outside the two-year flood plain unless approved by council.~~

~~(B) For a commercial development in a water supply rural watershed, a wastewater disposal area may not be located in the 40 percent buffer zone.~~

~~(C) Development for a wastewater disposal system is not permitted in a critical water quality zone.~~

~~(D) A package wastewater treatment plant with a capacity of 5,000 gallons a day or more must provide at least:~~

~~(1) 100 days of storage capacity; or~~

~~(2) if using subsurface effluent disposal, 48 hours of storage capacity.]~~

PART 115. A new City Code Section 30-5-364 is added to read:

§ 30-5-364 FLOODPLAIN MODIFICATION

(A) Floodplain modification within a critical water quality zone is prohibited except as allowed under Section 30-5-261 (*Critical Water Quality Zone Development*).

(B) Floodplain modification outside a critical water quality zone is prohibited except as allowed in this section.

(C) Floodplain modification is allowed only if the modification proposed:

(1) is necessary to protect the public health and safety;

(2) would provide a significant, demonstrable environmental benefit, as determined by a functional assessment of floodplain health as prescribed by the Environmental Criteria Manual;

(3) is located within a floodplain area classified as in fair or poor condition, as determined by a functional assessment of floodplain health, prescribed by the Environmental Criteria Manual; or

(4) is necessary for development allowed under Section 30-5-261 (*Critical Water Quality Development*) or 30-5-262 (*Critical Water Quality Zone Street Crossings*).

(D) Floodplain modifications must:

(1) be designed to accommodate existing and fully-vegetated conditions;

C3/134

(2) encourage sound engineering and ecological practices, prevent and reduce degradation of water quality, and encourage the stability and integrity of floodplains and waterways, as prescribed in the floodplain modification criteria in the Environmental Criteria Manual;

(3) restore floodplain health, or provide mitigation if restoration is infeasible, to support natural functions and processes as prescribed in the floodplain modification criteria in the Environmental Criteria Manual ; and

(4) comply with the requirements of Chapter 30-4 (*Drainage*), the Drainage Criteria Manual, and the Environmental Criteria Manual.

(E) If mitigation is required under this Section, it may be satisfied by:

(a) paying into the Riparian Zone Mitigation Fund a non- refundable amount established by ordinance;

(b) transferring in fee simple or placing restrictions on mitigation land approved by the Watershed Protection Department director and meeting the following conditions:

(i) located within the same watershed classification;

(ii) in accordance with the procedures in Section 25-8-26 (*Redevelopment in the Barton Springs Zone*), Subsection (H) (3);

(iii) dedicated to or restricted for the benefit of the City or another entity approved by the Watershed Protection Department director and which the City or other approved entity accepts; or

(c) a combination of the mitigation methods described in Subparagraphs (a) - (b), if approved by the Watershed Protection Department director.

PART 116. A new City Code Section 30-5-365 is added to read:

§ 30-5-365 INTERBASIN DIVERSION

(A) Development may not divert stormwater from one watershed to another, except as authorized by this Section.

(B) A proposed diversion of less than 20% of the site based on gross site area or less than 1 acre, whichever is smaller, may be allowed if the applicant demonstrates that:

(1) existing drainage patterns are maintained to the extent feasible; and

(2) there are no adverse environmental or drainage impacts.

PART 117. A new City Code Chapter 25-8, Subchapter A, Article 8 is added to read as follows and the remaining Articles are renumbered accordingly:

ARTICLE 8. URBAN WATERSHED REQUIREMENTS.

§ 25-8-371 APPLICABILITY; COMPLIANCE.

(A) This article applies to development in an urban watershed.

(B) A person who develops in an urban watershed must comply with the requirements of this article.

C3/139

§ 25-8-372 UPLANDS ZONE.

(A) This section applies to development in an uplands zone. Impervious cover limits in this section are expressed as percentages of gross site area.

(B) Maximum impervious cover for development outside the City's zoning jurisdiction is 80 percent.

PART 118. City Code Sections 30-5-392 (*Critical Water Quality Zone*) and 30-5-393 (*Water Quality Transition Zone*) are deleted in their entirety and the remaining Sections renumbered accordingly.

PART 119. City Code Section 30-5-394 (*Uplands Zone*) is amended to read:

§ 30-5-392[~~394~~] UPLANDS ZONE.

(A) This section applies to development in an uplands zone. Impervious cover limits in this section are expressed as percentages of gross[~~net~~] site area.

(B) This subsection applies in the extraterritorial jurisdiction and in the portions of the Lake, Rattan, Buttercup, South Brushy, and Brushy Creek watersheds that are in the zoning jurisdiction.

(1) Impervious cover for a single-family residential use with a minimum lot size of 5,750 square feet may not exceed:

(a) 45 percent; or

(b) if development intensity is transferred under Section 30-5-393 [~~395~~]*(Transfer Of Development Intensity)*, 50 percent.

(2) Impervious cover for a duplex or single-family residential use with a lot smaller than 5,750 square feet in size may not exceed:

(a) 55 percent; or

(b) if development intensity is transferred under Section 30-5-393 [~~395~~]*(Transfer Of Development Intensity)*, 60 percent.

(3) Impervious cover for a multifamily residential use may not exceed:

(a) 60 percent; or

(b) if development intensity is transferred under Section 30-5-393 [~~395~~]*(Transfer Of Development Intensity)*, 65 percent.

(4) Impervious cover for a commercial use may not exceed:

(a) 65 percent; or

(b) if development intensity is transferred under Section 30-5-393 [~~395~~] *(Transfer Of Development Intensity)*, 70 percent.

(5) Impervious cover for mixed use may not exceed

(a) the limits in subsection (B) (3) for the portion of the ground floor that is multifamily residential;

(b) the limits in subsection (B) (4) for the portion of the ground floor that is commercial; and

C3/136

(c) impervious cover for the entire site shall be based on the ratios determined on the ground floor.

(C) This subsection applies in the portion of the zoning jurisdiction that is outside the Lake, Rattan, Buttercup, South Brushy, and Brushy Creek watersheds.

(1) Impervious cover for a single-family residential use with a minimum lot size of 5,750 square feet may not exceed:

(a) 50 percent; or

(b) if development intensity is transferred under Section 30-5-393 [~~395~~] *(Transfer Of Development Intensity)*, 60 percent.

(2) Impervious cover for a duplex or single-family residential use with a lot smaller than 5,750 square feet in size may not exceed:

(a) 55 percent; or

(b) if development intensity is transferred under Section 30-5-393 [~~395~~] *(Transfer Of Development Intensity)*, 60 percent.

(3) Impervious cover for a multifamily residential use may not exceed:

(a) 60 percent; or

(b) if development intensity is transferred under Section 30-5-393 [~~395~~] *(Transfer Of Development Intensity)*, 70 percent.

(4) Impervious cover for a commercial use may not exceed:

(a) 80 percent; or

(b) if development intensity is transferred under Section 30-5-393 [~~395~~] *(Transfer Of Development Intensity)*, 90 percent.

(5) Impervious cover for mixed use may not exceed

(a) the limits in subsection (C) (3) for the portion of the ground floor that is multifamily residential;

(b) the limits in subsection (C) (4) for the portion of the ground floor that is commercial; and

(c) impervious cover for the entire site shall be based on the ratios determined on the ground floor.

PART 120. City Code Section 30-5-395 (*Transfer of Development Intensity*) is amended to read:

§ 30-5-393 [~~395~~] TRANSFER OF DEVELOPMENT INTENSITY.

(A) An applicant who complies with a provision of this subsection qualifies for the development intensity transfer described in the provision, subject to the requirements in subsection (B) and the impervious cover limitations in section 30-5-392 (*Uplands Zone*).

(1) The [~~For each acre of land in a critical water quality zone that an applicant dedicates in fee simple to the city or county, the~~] applicant may transfer 20,000 square feet of impervious cover to an uplands zone for each acre of land in a critical water quality zone:

C3/134

(a) dedicated to the City, County, or another entity approved by the Watershed Protection Department director in fee simple and which the City or other approved entity accepts; or

(b) on which restrictions are placed to the benefit of the City, County, or other approved entity and which the City or other approved entity accepts; and

(c) the applicant does not include in impervious calculations elsewhere.

(2) The applicant may transfer 20,000 square feet of impervious cover to an uplands zone for each acre of land in an uplands zone:

(a) located either in the 100-year floodplain or in an environmentally sensitive area as determined by environmental resource inventory and approved by the Watershed Protection Department director; and

(b) dedicated to the City, County, or another entity approved by the Watershed Protection Department director in fee simple and which the City, County, or other approved entity accepts; or

(c) on which restrictions are placed to the benefit of the City, County, or other approved entity and which the City, County, or other approved entity accepts; and

(d) the applicant does not include in impervious calculations elsewhere.

(3) Land dedicated in fee simple to the City or County under this subsection may also be [~~to~~] credited toward the parkland dedication requirements of Chapter 30-2, Article 3, Division 5 *(Parkland Dedication)*.

[~~(2) For each acre of land in the water quality transition zone that an applicant leaves undeveloped and undisturbed and does not include in impervious cover calculations elsewhere, the applicant may transfer 20,000 square feet of impervious cover to the uplands zone.~~

~~(3) For each acre of land in a water quality transition zone that an applicant uses for a golf course or other recreational use, restores using predominantly native plants and grasses, and provides a plan for minimizing the use and effect of pesticides, herbicides and fertilizers, the applicant may transfer 17,000 square feet of impervious cover to an uplands zone.~~

~~(4) For each acre of land in a water quality transition zone that an applicant uses for wastewater disposal, the applicant may transfer 10,000 square feet of impervious cover to an uplands zone.~~

~~(5) For each acre of land in an uplands zone that is located in the buffer zone of a critical environmental feature and that an applicant leaves natural and undisturbed, the applicant may transfer 20,000 square feet of impervious cover to an uplands zone. The buffer area may be included in the net site area calculations for the uplands zone.~~

C3/138

~~(6) For each acre of land in an uplands zone that an applicant uses for wastewater irrigation, restricts against future development, and leaves in a natural state, other than for necessary irrigation lines and tailwater control berms, the applicant may transfer 20,000 square feet of impervious cover to an uplands zone.~~

(B) An applicant who qualifies for a development intensity transfer under Subsection (A) must comply with requirements of this subsection to effect the transfer.

(1) For transfers between two subdivided tracts:

(a) An applicant may transfer development intensity to a receiving tract that is within the same watershed classification a the transferring tract [~~not more than one mile from the transferring tract~~]. This limitation does not apply if the transferring and receiving tracts are both owned by the applicant and are separated only by property that is also owned by the applicant.

(b) [~~(2)~~] An applicant must concurrently plat the transferring and receiving tracts and must transfer all development intensity at that time.

(c) [~~(3)~~] An applicant must note the development intensity transfer on the plats of the transferring and receiving tracts, in a manner determined by the single office.

(d) [~~(4)~~] An applicant must file in the deed records a restrictive covenant, approved by the city attorney and county attorney, that runs with the transferring tract and describes the development intensity transfer.

(2) For transfers between two site plans

(a) An applicant may transfer development intensity to a receiving tract that is within the same watershed classification as the transferring tract. This limitation does not apply if the transferring and receiving tracts are both owned by the applicant and are separated only by property that is also owned by the applicant.

(b) The transfer must be noted on the receiving and transferring site plans;

(c) An applicant must file in the deed records a restrictive covenant, approved by the city attorney and county attorney, that runs with the transferring tract and describes the development intensity transfer.

(d) The transfer must occur before the receiving and transferring site plans are released.

(3) For transfers within a single site plan, an applicant must file in the deed records a restrictive covenant, approved by the city attorney and the county attorney, that runs with the transferring tract and describes the development intensity transfer.

PART 121. City Code Section 30-5-422 (*Critical Water Quality Zone*) is deleted in its entirety and the remaining sections renumbered accordingly.

PART 122. City Code Section 30-5-423 (*Water Quality Transition Zone*) is amended to read:

§ 30-5-422[~~423~~] WATER QUALITY TRANSITION ZONE.

C3/139

(A) Development is prohibited in a water quality transition zone that lies over the South Edwards Aquifer recharge zone, except for:

(1) development described in Article 7, Division 1 *(Critical Water Quality Zone Restrictions)*; and

(2) minor drainage facilities or water quality controls that comply with Section 30-5-364 (*Floodplain Modification*) and the floodplain modification criteria in the Environmental Criteria Manual.

(B) In a water quality transition zone that does not lie over the South Edwards Aquifer recharge zone, the impervious cover of the land area of a site may not exceed 18 percent. In determining land area, land in the 100 year floodplain is excluded.

(C) Water quality controls [~~for development in an uplands zone or water quality transition zone~~] may [~~not~~] be located in a water quality transition zone that does not lie over the South Edwards Aquifer recharge zone.

PART 123. City Code Section 30-5-424 (*Uplands Zone*) is amended to read:

§ 30-5-423|~~424~~| UPLANDS ZONE.

(A) This section applies to development in an uplands zone. Impervious cover limits in this section are expressed as percentages of net site area.

(B) Impervious cover for a duplex or single-family residential use may not exceed:

(1) 30 percent; or

(2) if development intensity is transferred under Section 30-5-424[~~425~~]*(Transfer Of Development Intensity)*, 40 percent.

(C) Impervious cover for a commercial, [~~or~~] multifamily residential use, or mixed use may not exceed:

(1) 40 percent; or

(2) if development intensity is transferred under Section 30-5-424[~~425~~]*(Transfer Of Development Intensity)*, 55 percent.

PART 124. City Code Section 30-5-425 (*Transfer of Development Intensity*) is amended to read:

§ 30-5-424|~~425~~| TRANSFER OF DEVELOPMENT INTENSITY.

(A) An applicant who complies with a provision of this section qualifies for the development intensity transfer described in the provision, subject to the requirements in subsection (B) and the impervious cover limitations in section 30-5-423 (*Uplands Zone*).

(1) The [~~For each acre of land in a critical water quality zone that an applicant dedicates in fee simple to the city or county, the~~] applicant may transfer 15,000 square feet of impervious cover to an uplands zone for each acre of land in a critical water quality zone or water quality transition zone:

(a) dedicated to the City, County, or another entity approved by the Watershed Protection Department director in fee simple and which the City or other approved entity accepts; or

C3/140

(b) on which restrictions are placed to the benefit of the City, County, or other approved entity and which the City or other approved entity accepts; and

(c) the applicant does not include in impervious calculations elsewhere.

(2) Land dedicated in fee simple to the City or County under this subsection may also be to credited toward the parkland dedication requirements of Chapter 30-2, Article 3, Division 5 *(Parkland Dedication)*.

[~~(2) For each acre of land in the water quality transition zone that an applicant leaves undeveloped and undisturbed and does not include in impervious cover calculations elsewhere, the applicant may transfer 15,000 square feet of impervious cover to the uplands zone.~~

~~(3) For each acre of land in a water quality transition zone that an applicant uses for a golf course or other recreational use, restores using predominantly native plants and grasses, and provides a plan for minimizing the use and effect of pesticides, herbicides and fertilizers, the applicant may transfer 12,750 square feet of impervious cover to an uplands zone.~~

~~(4) For each acre of land in a water quality transition zone that an applicant uses for wastewater disposal, the applicant may transfer 7,500 square feet of impervious cover to an uplands zone.~~

~~(5) For each acre of land in an uplands zone that is located in the buffer zone of a critical environmental feature and that an applicant leaves natural and undisturbed, the applicant may transfer 15,000 square feet of impervious cover to an uplands zone. The buffer area may be included in the net site area calculations for the uplands zone.~~

~~(6) For each acre of land in an uplands zone that an applicant uses for wastewater irrigation, restricts against future development, and leaves in a natural state, other than for necessary irrigation lines and tailwater control berms, the applicant may transfer 15,000 square feet of impervious cover to an uplands zone.~~]

(B) An applicant who qualifies for a development intensity transfer under Subsection (A) must comply with requirements of this subsection to effect the transfer.

(1) For transfers between two subdivided tracts:

(a) An applicant may transfer development intensity to a receiving tract that is within the same watershed classification as the transferring tract [~~not more than one mile from the transferring tract~~]. This limitation does not apply if the transferring and receiving tracts are both owned by the applicant and are separated only by property that is also owned by the applicant.

(b)[~~(2)~~] An applicant must concurrently plat the transferring and receiving tracts and must transfer all development intensity at that time.

C3/14

(c) [~~(3)~~] An applicant must note the development intensity transfer on the plats of the transferring and receiving tracts, in a manner determined by the single office.

(d) [~~(4)~~] An applicant must file in the deed records a restrictive covenant, approved by the city attorney and county attorney, that runs with the transferring tract and describes the development intensity transfer.

(2) For transfers between two site plans

(a) An applicant may transfer development intensity to a receiving tract that is within the same watershed classification as the transferring tract. This limitation does not apply if the transferring and receiving tracts are both owned by the applicant and are separated only by property that is also owned by the applicant.

(b) The transfer must be noted on the receiving and transferring site plans;

(c) An applicant must file in the deed records a restrictive covenant, approved by the city attorney and county attorney, that runs with the transferring tract and describes the development intensity transfer.

(d) The transfer must occur before the receiving and transferring site plans are released.

(3) For transfers within a single site plan, an applicant must file in the deed records a restrictive covenant, approved by the city attorney and county attorney, that runs with the transferring tract and describes the development intensity transfer.

PART 125. City Code Section 30-5-452 (*Critical Water Quality Zone*) is deleted in its entirety and the remaining sections renumbered accordingly.

PART 126. City Code Section 30-5-453 (*Water Quality Transition Zone*) is amended to read:

§ 30-5-452[~~453~~] WATER QUALITY TRANSITION ZONE.

(A) Development is prohibited in a water quality transition zone that lies over the South Edwards Aquifer recharge zone, except for:

(1) development described in Article 7, Division 1 *(Critical Water Quality Zone Restrictions)*; and

(2) minor drainage facilities or water quality controls that comply with Section 30-5-364 (*Floodplain Modification*) and the floodplain modification criteria in the Environmental Criteria Manual.

(B) Development is prohibited in a water quality transition zone that lies outside the South Edwards Aquifer recharge zone, except for:

(1) development described in Article 7, Division 1 *(Critical Water Quality Zone Restrictions)*;

(2) streets;

C3/142

(3) minor drainage facilities or water quality controls that comply with Section 30-5-364 (*Floodplain Modification*) and the floodplain modification guidelines of the Environmental Criteria Manual; and

(4) ~~[parks or open spaces; and~~

~~(5)~~]duplex or single-family residential development with a minimum lot size of two acres and a density of not more than one unit for each three acres, excluding acreage in the 100 year flood plain.

(C) A lot that lies within a critical water quality zone must also include at least two acres in a water quality transition zone or uplands zone.

~~[(D) Water quality controls may not be located in a water quality transition zone.~~]

PART 127. City Code Section 30-5-454 (*Uplands Zone*) is amended to read:

§ 30-5-453[~~454~~[UPLANDS ZONE.

(A) This section applies to development in an uplands zone. Density and impervious cover limits are based on net site area.

(B) For a duplex or single family residential use, density may not exceed:

(1) one unit for each two acres, with a minimum lot size of three-quarters acre; or

(2) if development intensity is transferred under Section 30-5-454[~~455~~](*Transfer Of Development Intensity)*, one unit for each acre, with a minimum lot size of one-half acre.

(C) This Subsection applies to [~~For a~~] cluster housing [~~use,~~].

(1) density may not exceed:

(a)[~~(1)~~] one unit for each acre; or

(b)[~~(2)~~] if development intensity is transferred under Section 30-5-454[~~455~~](*Transfer Of Development Intensity)* two units for each acre.

(2) At least 40 percent of the uplands area of a site must be retained in or restored to its natural state to serve as a buffer. The buffer must be contiguous to the development, and must receive overland drainage from the developed areas of the site. Use of the buffer is limited to fences, utilities that cannot reasonably be located elsewhere, irrigation lines not associated with wastewater disposal, and access for site construction. A wastewater disposal area may not be located in the buffer.

(D) This subsection applies to a commercial, [~~or~~] multifamily residential use or mixed use.

(1) Impervious cover may not exceed:

(a) 20 percent; or

(b) if development intensity is transferred under Section 30-5-454[~~455~~] *(Transfer Of Development Intensity)*, 25 percent.

(2) At least 40 percent of the uplands area of a site must be retained in or restored to its natural state to serve as a buffer. The[~~, the~~] buffer must be contiguous to the development, and [~~the buffer~~] must receive overland drainage from the developed

63/143

areas of the site. Use of the buffer is limited to fences, utilities that cannot reasonably be located elsewhere, irrigation lines not associated with wastewater disposal, and access for site construction. A wastewater disposal area may not be located in the buffer.

PART 128. City Code Section 30-5-455 (*Transfer of Development Intensity*) is amended to read:

§ 30-5-454[~~455~~[TRANSFER OF DEVELOPMENT INTENSITY.

(A) An applicant who complies with a provision of this section qualifies for the development intensity transfer described in the provision, subject to the requirements in subsection (B) and the impervious cover limitations in section 30-5-453 (*Uplands Zone*).

(1) The [~~For each acre of land in a critical water quality zone that an applicant dedicates in fee simple to the city, county, or another entity approved by the single office,~~] the applicant may transfer one single-family residential housing unit or 6,000 square feet of impervious cover for commercial or multifamily development to an uplands zone for each acre of land in a critical water quality zone or water quality transition zone:

(a) dedicated to the City, County, or another entity approved by the Watershed Protection Department director in fee simple and which the City, County, or other approved entity accepts; or

(b) on which restrictions are placed to the benefit of the City, County, or other approved entity and which the City, County, or other approved entity accepts; and

(c) the applicant does not include in impervious calculations elsewhere.

(2) Land dedicated in fee simple to the City or County under this subsection may also be credited toward the parkland dedication requirements of Chapter 30-2, Article 3, Division 5 *(Parkland Dedication)*.

[~~(2) For each acre of land in the water quality transition zone that an applicant leaves undeveloped and undisturbed and does not include in impervious cover calculations elsewhere, the applicant may transfer one single-family residential housing unit or 6,000 square feet of impervious cover for commercial or multifamily development to the uplands zone.~~

~~(3) For each acre of land in a water quality transition zone that an applicant uses for a golf course or other recreational use, restores using predominantly native plants and grasses, and provides a plan for minimizing the use and effect of pesticides, herbicides and fertilizers, the applicant may transfer 85 percent of a single-family residential housing unit or 5,100 square feet of impervious cover for commercial or multifamily development to an uplands zone.~~

~~(4) For each acre of land in a water quality transition zone that an applicant uses for wastewater disposal, the applicant may transfer 50 percent of a single-family~~

~~residential housing unit or 3,000 square feet of impervious cover for commercial or multifamily development to an uplands zone.~~

~~(5) For each acre of land in an uplands zone that is located in the buffer zone of a critical environmental feature and that an applicant leaves natural and undisturbed, the applicant may transfer one single-family residential housing unit or 6,000 square feet of impervious cover for commercial or multifamily development to an uplands zone. The buffer area may be included in the net site area calculations for the uplands zone.~~

~~(6) For each acre of land in an uplands zone that an applicant uses for wastewater irrigation, restricts against future development, and leaves in a natural state, other than for necessary irrigation lines and tailwater control berms, the applicant may transfer one single-family residential housing unit or 6,000 square feet of impervious cover for commercial or multifamily development to an uplands zone.~~]

(B) An applicant who qualifies for a development intensity transfer under Subsection (A) must comply with requirements of this subsection to effect the transfer.

(1) For transfers between two subdivided tracts:

(a) An applicant may transfer development intensity to a receiving tract that is within the same watershed classification as the transferring tract [~~not more than one mile from the transferring tract~~]. This limitation does not apply if the transferring and receiving tracts are both owned by the applicant and are separated only by property that is also owned by the applicant.

(b) [~~(2)~~] An applicant must concurrently plat the transferring and receiving tracts and must transfer all development intensity at that time.

(c) [~~(3)~~] An applicant must note the development intensity transfer on the plats of the transferring and receiving tracts, in a manner determined by the single office.

(d) [~~(4)~~] An applicant must file in the deed records a restrictive covenant, approved by the city attorney and county attorney, that runs with the transferring tract and describes the development intensity transfer.

(2) For transfers between two site plans

(a) An applicant may transfer development intensity to a receiving tract that is within the same watershed classification as the transferring tract. This limitation does not apply if the transferring and receiving tracts are both owned by the applicant and are separated only by property that is also owned by the applicant.

(b) The transfer must be noted on the receiving and transferring site plans;

(c) An applicant must file in the deed records a restrictive covenant, approved by the city attorney and county attorney, that runs with the transferring tract and describes the development intensity transfer.

(d) The transfer must occur before the receiving and transferring site plans are released.

(3) For transfers within a single site plan, an applicant must file in the deed records a restrictive covenant, approved by the city attorney and county attorney, that runs with the transferring tract and describes the development intensity transfer.

C3/145

PART 129. City Code Section 30-5-481 (*Applicability; Compliance*), Subsection (B) is amended to read:

(B) A person who develops in the Barton Springs Zone must comply with the requirements of:

(1) this article; and

(2) Article 13[~~12~~] *(Save Our Springs Initiative)*.

PART 130. City Code Section 30-5-482 (*Critical Water Quality Zone*) is deleted in its entirety and the remaining sections renumbered accordingly.

PART 131. City Code Section 30-5-483 (*Water Quality Transition Zone*) is amended to read:

§ 30-5-482[~~483~~] WATER QUALITY TRANSITION ZONE.

(A) Development is prohibited in a water quality transition zone that lies over the Edwards Aquifer recharge zone, except for:

(1) development described in Article 7, Division 1 *(Critical Water Quality Zone Restrictions)*; and

(2) minor drainage facilities or water quality controls that comply with the floodplain modification criteria [~~guidelines~~] of the Environmental Criteria Manual.

(B) Development is prohibited in a water quality transition zone that lies outside the Edwards Aquifer recharge zone, except for:

(1) development described in Article 7, Division 1 *(Critical Water Quality Zone Restrictions)*;

(2) minor drainage facilities or water quality controls that comply with Section 30-5-364 (*Floodplain Modification*) and the floodplain modification guidelines of the Environmental Criteria Manual;

(3) streets; and

(4) duplex or single-family residential housing with a minimum lot size of two acres and a density of not more than one unit for each three acres, excluding acreage in the 100 year floodplain. [~~; and~~

~~(5) vegetative filter strips.~~]

PART 132. City Code Section 30-5-512 (*Amendment*) is amended to read:

§ 30-5-512 AMENDMENT.

This article [~~shall not be repealed or amended by City Council until two years after the effective date of the SOS ordinance, August 10, 1992. Thereafter, this article~~] may be repealed or amended only by an affirmative vote of a three-quarters majority of the City Council.

C3/140

PART 133. City Code Section 30-5-514 (*Pollution Prevention Required*), Subsection (A) is amended to read:

(A) In the watersheds contributing to Barton Springs, no development nor any revision, extension, or amendment thereof, may be approved unless it is designed, carried out, and maintained on a site-by-site basis to meet the pollution prevention requirements set forth below for the life of the project. In order to prevent pollution, impervious cover for all such development shall be limited to a maximum of 15 percent in the entire recharge zone, 20 percent of the contributing zone within the Barton Creek watershed, and 25 percent in the remainder of the contributing zone. The impervious cover limits shall be calculated on a net site area basis. In addition, runoff from such development shall be managed through water quality controls and onsite pollution prevention and assimilation techniques so that no increases occur in the respective average annual loadings of total suspended solids, total phosphorus, total nitrogen, chemical oxygen demand, [~~biochemical oxygen demand,~~] total lead, cadmium, E. coli., [~~fecal coliform,~~] fecal streptococci, volatile organic compounds, total organic carbon, pesticides, and herbicides from the site. For a given project, impervious cover shall be reduced if needed to assure compliance with these pollutant load restrictions.

PART 134. City Code Section 30-5-516 (*Application to Existing Tracts, Platted Lots, and Public Schools*) is amended to add a new Subsection (D) to read:

(D) This article does not apply to a roadway project with less than 5,000 square feet of new impervious cover. For the purposes of this Section, roadway improvements are limited to intersection upgrades, low-water crossing upgrades, additions for bicycle lanes, and additions for mass transit stops.

PART 135. City Code Section 30-5-652 (*Fills at Lake Austin, Town Lake, and Decker Lake*) is amended to read:

§ 30-5-652 FILLS AT LAKE AUSTIN, LADY BIRD [~~TOWN~~] LAKE, AND [~~DECKER~~] LAKE WALTER E. LONG.

(A) Approval by the Parks and Recreation Board is required to place fill in Lake Austin, Lady Bird [~~Town~~] Lake, or [~~Decker~~] Lake Walter E. Long.

(B) A person must file a written application with the Parks and Recreation Board for an approval under this section.

(C) This section applies to a development application that includes a proposal to:

(1) modify the shoreline of Lake Austin, Lady Bird Lake, or Lake Walter E. Long; or

(2) dredge in or along that lake.

(D) Before the single office may approve the development application, the single office must submit the development application to the Parks and Recreation Board.

(E) The board shall review and comment on:

(1) the navigational safety of the proposed development; and

C3/144

(2) the effect of the development on the recreational and natural character of the lake.

(F) The board may develop specific criteria for determining:

(1) the navigational safety of a proposed development; or

(2) the effect of a proposed development on the recreational and natural character of Lake Austin, Lady Bird Lake, or Lake Walter E. Long.

PART 136. City Code Section 30-2-132 (*Easements and Alleys*), Subsection (A) is amended to read:

(A) Easements for public utilities and drainage ways shall be retained in all subdivisions in the widths and locations determined necessary by the single office. All easements shall be dedicated to public use for the named purpose and shall be aligned to minimize construction and future maintenance costs [~~cost~~].

PART 137. Parts 1through 79 of this ordinance take effect on _____, 2013. Parts 80 through 136 of this ordinance take effect on the effective date of a Travis County ordinance enacting similar provisions.

PASSED AND APPROVED

§
§
_____, 2013 §

Lee Leffingwell
Mayor

APPROVED: _____
Karen Kennard
City Attorney

ATTEST: _____
Jannette Goodall
City Clerk

C3/148

Exhibit A

Chapter 25-7 DRAINAGE

draft

C3/149

CHAPTER 25-7. DRAINAGE.
Table of Contents

ARTICLE 1. GENERAL PROVISIONS.

§ 25-7-1 Applicability of Chapter
§ 25-7-2 Definitions
§ 25-7-3 Obstruction of Waterways Prohibited
§ 25-7-4 Duty to Maintain Unobstructed Waterways
§ 25-7-5 Standing Water Declared a Nuisance
§ 25-7-6 Computation of Stormwater Runoff

ARTICLE 2. DRAINAGE STUDIES; EROSION HAZARD ANALYSIS; FLOODPLAIN DELINEATION.

§ 25-7-31 Director Authorized to Require Drainage Studies
§ 25-7-32 Director Authorized to Require Erosion Hazard Zone Analysis
§ 25-7-33 Floodplain Maps, Delineation, and Depiction

ARTICLE 3. REQUIREMENTS FOR APPROVAL.

§ 25-7-61 Criteria for Approval of Development Applications
§ 25-7-62 Certificate of Professional Engineer Required for Certain Alterations and Improvements
§ 25-7-63 Approval of Certain Permits and Certificates
§ 25-7-64 Design and Construction of Drainage Facilities and Improvements
§ 25-7-65 Enclosed Storm Drains, Bridges, and Culverts

ARTICLE 4. SPECIAL REQUIREMENTS IN ZONING JURISDICTION.

§ 25-7-91 Applicability of Article
§ 25-7-92 Encroachment on Floodplain Prohibited
§ 25-7-93 General Exceptions
§ 25-7-94 Requirements in Central Business Area
§ 25-7-95 Requirements for Parking Areas
§ 25-7-96 Requirements in the 25-Year Floodplain

ARTICLE 5. RESPONSIBILITIES OF OWNER OR DEVELOPER.

§ 25-7-151 Stormwater Conveyance and Drainage Facilities
§ 25-7-152 Dedication of Easements and Rights-of-way
§ 25-7-153 Detention Basin Maintenance and Inspection

C3/150

CHAPTER 25-7. DRAINAGE.
ARTICLE 1. GENERAL PROVISIONS.

§ 25-7-1 APPLICABILITY OF CHAPTER.

(A) Except as provided in Subsection (B), this chapter applies in the planning jurisdiction.

(B) For the preliminary plan, final plat, or subdivision construction plan in the portion of the city's extraterritorial jurisdiction that is within Travis County:

(1) this chapter does not apply; and

(2) Title 30 (*Austin/Travis County Subdivision Regulations*) governs.

§ 25-7-2 DEFINITIONS

In this chapter:

(1) ADVERSE FLOODING IMPACT means an increase in flood risk or hazards.

(2) DEVELOPMENT APPLICATION means an application required under Title 25 for development, such as an application for subdivision, site plan, or building permit.

(3) DIRECTOR, when used without a qualifier, means the director of the Watershed Protection Department, or the director's designee.

(4) DRAINAGE EASEMENT means an easement or right-of-way for a drainage facility required by Section 25-7-152 (*Dedication of Easements and Rights-Of-Way*).

(5) EROSION HAZARD ZONE means an area where future stream channel erosion is predicted to result in damage to or loss of property, buildings, infrastructure, utilities, or other valued resources.

(6) FEMA means the Federal Emergency Management Agency.

(7) FEMA FLOODPLAIN means a special flood hazard area delineated on a flood insurance rate map.

(8) FLOOD INSURANCE RATE MAP means an official map of a community on which FEMA has delineated both the areas of special flood hazards and the risk premium zones applicable to the community.

(9) 100 YEAR FLOODPLAIN means the 100-year floodplain calculated under fully developed conditions as prescribed by the Drainage Criteria Manual.

(10) 25 YEAR FLOODPLAIN means the 25-year floodplain calculated under fully developed conditions as prescribed by the Drainage Criteria Manual.

(11) WATERWAY means a watercourse, drainage way, branch, creek, or stream including, but not limited to, the limits of the 100-year and 25-year floodplains.

§ 25-7-3 OBSTRUCTION OF WATERWAYS PROHIBITED.

Unless authorized by a development application approved under Title 25, a person may not place, or cause to be placed, an obstruction in a waterway.

§ 25-7-4 DUTY TO MAINTAIN UNOBSTRUCTED WATERWAYS.

The person in control of real property traversed by a waterway shall keep the waterway free from an obstruction that is not authorized by a development application approved under Title 25.

§ 25-7-5 STANDING WATER DECLARED A NUISANCE.

A pool of standing water in a waterway that is caused by an unauthorized obstruction in the waterway is declared to be a nuisance.

§ 25-7-6 COMPUTATION OF STORMWATER RUNOFF.

Stormwater runoff shall be computed on the basis of a fully developed contributing drainage area or watershed as determined under the Drainage Criteria Manual.

ARTICLE 2. DRAINAGE STUDIES; EROSION HAZARD ANALYSIS; FLOODPLAIN DELINEATION.

§ 25-7-31 DIRECTOR AUTHORIZED TO REQUIRE DRAINAGE STUDIES.

(A) The director may require the owner of real property to provide, at the owner's expense and as a condition for development application approval, a drainage study for the total area to be ultimately developed.

(B) The drainage study must be in accordance with the Drainage Criteria Manual.

(C) If a drainage study is required under this section, the City may not accept for review a development application for any portion of the proposed development until the director has received the required drainage study.

§ 25-7-32 DIRECTOR AUTHORIZED TO REQUIRE EROSION HAZARD ZONE ANALYSIS.

(A) The director may require the owner of real property to provide, at the owner's expense and as a condition for development application approval, an analysis to establish the erosion hazard zone if the proposed development is:

(1) within 100 feet of the centerline of a waterway with a drainage area of 64 acres or greater; or

(2) located where significant erosion is present.

(B) The erosion hazard zone analysis must be in accordance with the Drainage Criteria Manual.

C3/152

(C) If an erosion hazard zone analysis is required under this section, the City may not accept for review a development application for any portion of the proposed development until the director has received the required erosion hazard zone analysis.

§ 25-7-33 FLOODPLAIN MAPS, DELINEATION, AND DEPICTION.

(A) The director shall designate and maintain official floodplain maps.

(B) If an official floodplain map is not delineated, the owner of property to be developed shall calculate the boundaries of the 100-year floodplain in accordance with the Drainage Criteria Manual and submit the calculation to the director for approval.

(C) If the director determines that FEMA regulations require a submission to the agency of a request for a flood insurance rate map revision, the director may require that the revision request to FEMA be submitted by the owner of property to be developed.

(D) A person who files a development application shall depict, as applicable:

(1) on a preliminary plan or subdivision construction plan:
  (a) a 100-year floodplain;
  (b) a FEMA floodplain; and
  (c) a drainage easement or proposed drainage easement;

(2) on a final plat:
  (a) a drainage easement; and
  (b) a portion of a FEMA floodplain that is outside a drainage easement ;

(3) on a site plan, including site plan exemption or general permit:
  (a) a 100-year floodplain;
  (b) a FEMA floodplain; and
  (c) a drainage easement; or

(4) on a residential building permit:
  (a) a 100-year floodplain;
  (b) a FEMA floodplain; and
  (c) a drainage easement.

(E) If a portion of a FEMA floodplain is outside a drainage easement, the owner of property to be developed shall, on a final plat:

(1) identify the portion of the FEMA floodplain that is outside the drainage easement, including the community and panel number of the flood insurance rate map; and

(2) include a note that:
  (a) refers the reader to federal regulations governing development in a FEMA floodplain;
  (b) states that flood insurance may be required; and
  (c) describes efforts to revise the flood insurance rate map.

C3/153

ARTICLE 3. REQUIREMENTS FOR APPROVAL.

§ 25-7-61 CRITERIA FOR APPROVAL OF DEVELOPMENT APPLICATIONS.

(A) A development application may not be approved unless:

(1) the proposed development application demonstrates sufficient capacity for the design flood, as determined under the Drainage Criteria Manual;

(2) each proposed improvement is sufficiently strong to resist:

(a) external pressure caused by earth or building; and

(b) internal pressure or abrasion caused by water or debris;

(3) the proposed grades will not permit water to gather in a pool that may become stagnant, excluding variable pools in creek beds as a result of natural channel design;

(4) temporary and permanent measures to control erosion are sufficient to minimize siltation of the waterway, as determined under the Environmental Criteria Manual; and

(5) the proposed development:

(a) will not result in additional adverse flooding impact on other property;

(b) to the greatest extent feasible, preserves the natural and traditional character of the land and the waterway located within the 100-year floodplain;

(c) except as provided by Subsection (B), includes on-site control of the two-year peak flow, as determined under the Drainage Criteria Manual and the Environmental Criteria Manual;

(d) will not result in additional erosion impacts on other property; and

(e) locates all proposed improvements outside the erosion hazard zone, unless protective works are provided as prescribed in the Drainage Criteria Manual.

(B) A proposed development may provide off-site control of the two-year peak flow, if the off-site control will not cause:

(1) an adverse water quality impact from increased in-stream peak flow; or

(2) streambank erosion.

§ 25-7-62 CERTIFICATE OF PROFESSIONAL ENGINEER REQUIRED FOR CERTAIN ALTERATIONS AND IMPROVEMENTS.

(A) The director may not accept any plan or specification for a proposed alteration or improvement of a bed or bank of a waterway unless the plan or specification is accompanied by a certificate bearing the seal of a Texas professional engineer certifying that:

C3/154

(1) the hydraulic and structural design is adequate; and

(2) the proposed alteration or improvement complies with the ordinances of this City, the Drainage Criteria Manual, and the laws of this state.

(B) Subsection (A) does not prohibit the director from accepting a plan or specification for a minor alteration or improvement that, in the judgment of the director, does not require certification by a Texas professional engineer.

§ 25-7-63 APPROVAL OF CERTAIN PERMITS AND CERTIFICATES.

If a development application requires the completion or partial completion of a drainage improvement before a building may be constructed on a lot, a building permit or certificate of compliance may not be issued for the lot unless the director of the Planning and Development Review Department approves the issuance.

§ 25-7-64 DESIGN AND CONSTRUCTION OF DRAINAGE FACILITIES AND IMPROVEMENTS.

The design and construction of a drainage facility or improvement must:

(1) be in accordance with the Drainage Criteria Manual; and

(2) provide for maintenance and protection from erosion in accordance with the Environmental Criteria Manual.

§ 25-7-65 ENCLOSED STORM DRAINS, BRIDGES, AND CULVERTS.

(A) The director of the Planning and Development Review Department must approve the plans and specifications for a storm drain, bridge, or culvert.

(B) The city manager may inspect the construction of each storm drain, bridge, or culvert.

ARTICLE 4. SPECIAL REQUIREMENTS IN ZONING JURISDICTION.

§ 25-7-91 APPLICABILITY OF ARTICLE.

This article applies in the zoning jurisdiction.

§ 25-7-92 ENCROACHMENT ON FLOODPLAIN PROHIBITED.

(A) Except as provided in Section 25-7-96 (*Exceptions In The 25-Year Floodplain*), a development application may not be approved if a proposed building or parking area encroaches on the 25-year floodplain.

(B) Except as provided in Sections 25-7-93 (*General Exceptions*), 25-7-94 (*Exceptions in Central Business Area*), and 25-7-95 (*Exceptions for Parking Areas*), a development application may not be approved if a proposed building or parking area encroaches on the 100-year flood plain.

(C) The director may grant a variance to Subsection (A) or (B) if the director determines that:

C3/155

(1) the finished floor elevation of a proposed building is at least two feet above the 100-year floodplain;

(2) normal access to a proposed building is by direct connection with an area above the regulatory flood datum, as prescribed by Chapter 25-12, Article 1 (*Building Code*);

(3) a proposed building complies with the requirements in Chapter 25-12, Article 1, Section 25-12-3 Appendix G (*Flood Resistant Construction*) and Section1612 (*Flood Loads*);

(4) the development compensates for the floodplain volume displaced by the development;

(5) the development improves the drainage system by exceeding the requirements of Section 25-7-61 (*Criteria for Approval of Development Applications*), as demonstrated by a report provided by the applicant and certified by an engineer registered in Texas;

(6) the variance is required by unique site conditions; and

(7) development permitted by the variance does not result in additional adverse flooding impact on other property.

(D) The director shall prepare written findings to support the grant or denial of a variance request under this Section.

§ 25-7-93 GENERAL EXCEPTIONS.

(A) A development application with a proposed building or parking area that encroaches on the 100-year floodplain may be approved if the encroachment is:

(1) a parking area that is smaller than 5,000 square feet or an unoccupied structure that has an area of less than 1,000 square feet, and the director determines that the proposed development otherwise complies with the requirements of this title;

(2) a single-family or duplex residential structure in a subdivision:

(a) recorded before September 25, 1983; and

(b) in which only one residential structure is built on a single lot;

(3) a building authorized by a waterway development permit issued under Chapter 9-10 before September 25, 1983;

(4) a building in the 100-year floodplain of:

(a) Lady Bird Lake; or

(b) the Colorado River downstream from Longhorn Dam; or

(5) a boat dock in the 100-year floodplain of Lady Bird Lake, Lake Walter E. Long, or Lake Austin, and construction of the dock is otherwise permitted under this title.

(B) A development application that may be approved under this section must:

(1) comply with the flood proofing requirements of Chapter 25-12, Article 1 (*Building Code*); and

(2) result in no additional adverse flooding impact on other properties, as determined by the director .

§ 25-7-94 REQUIREMENTS IN CENTRAL BUSINESS AREA.

(A) This section establishes requirements that apply in the central business area.

(B) In this section, central business area means the area bounded by Interstate Highway 35, Riverside Drive, Barton Springs Road, Lamar Boulevard, and 15th Street.

(C) A development application with a proposed building or parking area that encroaches on the 100-year flood plain may be approved if:

(1) the floor slab of a proposed building is at least two feet above the 100-year floodplain;

(2) normal access to that building is by direct connection with an area above the regulatory flood datum, as defined by Chapter 25-12, Article 1 (*Building Code*);

(3) development associated with construction of the building compensates for any floodplain volume displaced by that construction; and

(4) the applicant demonstrates by means of a study certified by a Texas registered professional engineer that the construction of the building and development activities associated with that building improves the drainage system by exceeding the minimum requirements of Sections 25-7-3 (*Obstruction Of Waterways Prohibited*), 25-7-4 (*Duty To Maintain Unobstructed Waterways*), and 25-7-5 (*Standing Water Declared A Nuisance*).

(D) The director may waive a requirement of Subsection (C) if:

(1) the applicant submits:

(a) a written request identifying the requirement to be waived; and

(b) a justification for the waiver prepared by a Texas registered engineer certifying that waiving the requirement will not result in additional adverse flooding of other property; and

(2) the director determines that:

(a) the waiver is required by unique site conditions;

(b) the waiver is a minimum departure from the requirements of Subsection (C); and

(c) waiving the requirement will not result in additional adverse flooding of other property.

(E) A development application that may be approved under this section must comply with the flood proofing requirements of Chapter 25-12, Article 1 (*Building Code*).

§ 25-7-95 REQUIREMENTS FOR PARKING AREAS.

(A) This section establishes requirements that apply to the development of a parking area.

C7-154

(B) A development application with a proposed parking area that encroaches on the 100-year floodplain may be approved if:

(1) the level of water detention or waterflow in the parking area during the 100-year storm does not exceed:

(a) an average depth of eight inches; or

(b) a maximum depth of 12 inches at any point; and

(2) appropriate signs, approved by the director, are posted to notify persons that the water detention or waterflow in the parking lot may exceed a depth of eight inches.

(C) Notwithstanding the requirements of Subsection (B), a development application with a proposed parking area that encroaches on the 100-year floodplain may be approved if the parking area is:

(1) accessory to a single-family or duplex residential structure on a lot in a subdivision recorded before September 25, 1983;

(2) authorized by a waterway development permit issued under Chapter 9-10 before September 25, 1983; or

(3) in the 100-year floodplain of:

(a) Lady Bird Lake; or

(b) the Colorado River downstream from Longhorn Dam.

§ 25-7-96 REQUIREMENTS IN THE 25-YEAR FLOODPLAIN.

(A) This section establishes requirements that apply to development in the 25-year floodplain.

(B) A development application with a proposed building or parking area that encroaches on the 25-year floodplain may be approved if:

(1) the building or parking area is located on parkland, a golf course, or other public or recreational land;

(2) the building, if any, is a restroom or bath facility, concession stand, tool shed, or pump house, with an area of less than 1,000 square feet;

(3) the parking area, if any, is smaller than 5,000 square feet; and

(4) the director determines that the proposed development:

(a) will not result in additional adverse flooding impact on other properties; and

(b) otherwise complies with the requirements of this title.

(C) A development application approved under this section must comply with the flood proofing requirements of Chapter 25-12, Article 1 (*Building Code*).

ARTICLE 5. RESPONSIBILITIES OF OWNER OR DEVELOPER.

§ 25-7-151 STORMWATER CONVEYANCE AND DRAINAGE FACILITIES.

C3/158

(A) The owner or developer of property to be developed is responsible for the conveyance of all stormwater flowing through the property, including stormwater that:

(1) is directed to the property by other developed property; or

(2) naturally flows through the property because of the topography.

(B) Future upstream development shall be accounted for as determined under the Drainage Criteria Manual.

(C) If the construction or improvement of a storm drainage facility is required along a property line that is common to more than one property owner, the owner proposing to develop the property is, at the time the property is developed, responsible for each required facility on either side of the common property line.

(D) The responsibility of the owner proposing to develop the property includes the responsibility to dedicate or obtain the dedication of any right-of-way or easement necessary to accommodate the required construction or improvement of the storm drainage facility.

(E) If an owner of property proposes to develop only a portion of that property, a stormwater drainage facility to serve that portion of the property proposed for immediate development or use is required, unless the director determines that construction or improvement of a drainage facility outside that portion of the property to be developed is essential to the development or use of the property to be developed.

(F) The owner or developer shall provide adequate off-site drainage improvements to accommodate the full effects of the development. The city may assist the owner or developer in the acquisition of an interest in property necessary to provide an off-site improvement, if the owner or developer:

(1) by affidavit, certifies that a bona fide attempt to provide the off-site drainage improvements has not been successful; and

(2) provides an adequate guarantee that the owner or developer will:

(a) finance the entire cost of acquiring the necessary property interest; and

(b) retain full responsibility for construction of the required off-site improvement.

§ 25-7-152 DEDICATION OF EASEMENTS AND RIGHTS-OF-WAY.

(A) The owner of real property proposed to be developed shall dedicate to the public an easement or right-of way for a drainage facility, open or enclosed, and stormwater flow to the limits of the 100-year floodplain, as prescribed in the Drainage Criteria Manual.

(B) An easement or right-of-way required by Subsection (A) must be of sufficient width to provide continuous access for the operation, maintenance, or repair of a drainage facility as prescribed in the Drainage Criteria Manual.

C3159

(C) The owner of the property shall dedicate any additional easement or right-of-way that is necessary to allow continuous access for the operation, maintenance, or rehabilitation of a drainage facility.

(D) A part of a lot or tract of land that is located in an easement or right-of-way required by this section may be included as part of the area of the lot or tract of land in the calculation of density or impervious cover.

(E) For property in the full-purpose limits of the city, the director may grant a variance to Subsection (A) if the director determines:

(1) development with the variance does not result in additional adverse flooding of other property; and

(2) the development:

(a) is permitted by a variance granted under Section 25-7-92(C) (*Encroachments On Floodplain Prohibited*);

(b) is permitted in a floodplain under Section 25-7-93 (*General Exceptions*), Section 25-7-94 (*Exceptions in Central Business Area*), Section 25-7-95 (*Exceptions for Parking Areas*), or Section 25-7-96 (*Exceptions in the 25-Year Floodplain*);

(c) is not a building or parking area; or

(d) is a nonconforming use, as defined by Chapter 25-12, Article 1, Appendix G, Section G102.3 (*Nonconforming Uses*).

§ 25-7-153 DETENTION BASIN MAINTENANCE AND INSPECTION.

(A) In this section:

(1) COMMERCIAL DEVELOPMENT means all development other than Residential Development.

(2) COMMERCIAL BASIN means a required detention basin or appurtenance that receives stormwater runoff from a Commercial Development.

(3) DCM STANDARDS means the provisions in the Drainage Criteria Manual regarding maintenance of a required detention basin or appurtenance.

(4) RESIDENTIAL DEVELOPMENT means development of two dwelling units or less per lot.

(5) RESIDENTIAL BASIN means a required detention basin or appurtenance that receives stormwater runoff from a Residential Development.

(B) The record owner of a commercial development shall maintain the commercial basin serving the commercial development in accordance with the DCM standards, whether or not the commercial basin is located on the same property as the commercial development. The record owner shall provide the City proof of the right to access and maintain the commercial basin if it is not located on the same property as the commercial development.

(C) If more than one commercial development is served by a single commercial basin, the record owners of the commercial basin and all commercial developments

C3/160

served by the commercial basin shall be jointly and severally responsible for maintenance of the commercial basin in accordance with the DCM standards.

(D) The director may authorize an alternative arrangement for maintenance of a residential or commercial basin in accordance with the DCM standards. If an alternative arrangement is approved by the director, the city attorney shall determine whether an agreement is necessary; the agreement must be approved by the city attorney and filed of record.

(E) The City shall inspect each commercial basin that is not a subsurface basin at least once every three years to ensure that the commercial basin is being maintained in accordance with the DCM standards. If the commercial basin fails inspection requiring an additional inspection, the director may charge a re-inspection fee.

(F) The record owner of a subsurface commercial basin must provide the Watershed Protection Department with a maintenance plan and an annual report from a registered engineer verifying that the basin is in proper operating condition.

(G) Until the City accepts a residential basin for maintenance, the record owner(s) of the residential basin and the residential development served shall maintain the residential basin in accordance with the DCM standards.

(H) The City shall be responsible for maintenance of a residential basin only after the residential basin has been accepted for maintenance by the City. The City will accept a residential basin upon determining that it meets all requirements of the Drainage Criteria Manual.

draft

C3/161

Exhibit B

Chapter 30-4

draft

C3/162

CHAPTER 30-4. DRAINAGE

ARTICLE 1. GENERAL PROVISIONS.
§ 30-4-1 Definitions
§ 30-4-2 Obstruction of Waterways Prohibited
§ 30-4-3 Duty to Maintain Unobstructed Waterways
§ 30-4-4 Standing Water Declared a Nuisance
§ 30-4-5 Computation of Stormwater Runoff

ARTICLE 2. DRAINAGE STUDIES; EROSION HAZARD ANALYSIS; FLOODPLAIN DELINEATION.
§ 30-4-31 Single Office Authorized to Require Drainage Studies
§ 30-4-32 Single Office Authorized to Require Erosion Hazard Zone Analysis
§ 30-4-33 Floodplain Maps, Delineation, and Depiction

ARTICLE 3. REQUIREMENTS FOR APPROVAL.
§ 30-4-61 Criteria for Approval of Development Applications
§ 30-4-62 Certificate of Professional Engineer Required for Certain Alterations and Improvements
§ 30-4-63 Approval by Single Office of Certain Permits and Certificates
§ 30-4-64 Design and Construction of Drainage Facilities and Improvements
§ 30-4-123 Enclosed Storm Sewers, Bridges, and Culverts

ARTICLE 5. RESPONSIBILITIES OF OWNER OR DEVELOPER.
§ 30-4-151 Stormwater Conveyance and Drainage Facilities
§ 30-4-152 Dedication of Easements and Rights-of-way
§ 30-4-153 Detention Basin Maintenance and Inspection

draft

C3/163

ARTICLE 1. GENERAL PROVISIONS.

§ 30-4-1 DEFINITIONS

In this chapter:

(1) ADVERSE FLOODING IMPACT means an increase in flood risk or hazards.

(2) DEVELOPMENT APPLICATION means an application required under Title 25 for development, such as an application for subdivision, site plan, or building permit.

(3) DIRECTOR, when used without a qualifier, means the director of the Watershed Protection Department, or the director's designee.

(4) DRAINAGE EASEMENT means an easement or right-of-way for a drainage facility required by Section 25-7-152 (*Dedication of Easements and Rights-Of-Way*).

(5) EROSION HAZARD ZONE means an area where future stream channel erosion is predicted to result in damage to or loss of property, buildings, infrastructure, utilities, or other valued resources.

(6) FEMA means the Federal Emergency Management Agency.

(7) FEMA FLOODPLAIN means a special flood hazard area delineated on a flood insurance rate map.

(8) FLOOD INSURANCE RATE MAP means an official map of a community on which FEMA has delineated both the areas of special flood hazards and the risk premium zones applicable to the community.

(9) 100 YEAR FLOODPLAIN means the 100-year floodplain calculated under fully developed conditions as prescribed by the Drainage Criteria Manual.

(10) 25 YEAR FLOODPLAIN means the 25-year floodplain calculated under fully developed conditions as prescribed by the Drainage Criteria Manual.

(11) WATERWAY means a watercourse, drainage way, branch, creek, or stream including, but not limited to, the limits of the 100-year and 25-year floodplains.

§ 30-4-2 OBSTRUCTION OF WATERWAYS PROHIBITED.

Unless authorized by a subdivision construction plan approved under County Code Chapter 64 *(Regulations for Flood Management and Guidelines for Development Permits)*, or a development application approved under City Code Title 25, a person may not place, or cause to be placed, an obstruction in a waterway.

§ 30-4-3 DUTY TO MAINTAIN UNOBSTRUCTED WATERWAYS.

The person in control of real property traversed by a waterway shall keep the waterway free from an obstruction that is not authorized by a development application approved under Title 25 or County Code Chapter 64.

§ 30-4-4 STANDING WATER DECLARED A NUISANCE.

A pool of standing water in a waterway that is caused by an unauthorized obstruction in the waterway is declared to be a nuisance.

§ 30-4-5 COMPUTATION OF STORMWATER RUNOFF.

Stormwater runoff shall be computed on the basis of a fully developed contributing drainage area or watershed as determined under the Drainage Criteria Manual.

ARTICLE 2. DRAINAGE STUDIES; EROSION HAZARD ANALYSIS; FLOODPLAIN DELINEATION.

C3/164

§ 30-4-31 SINGLE OFFICE AUTHORIZED TO REQUIRE DRAINAGE STUDIES.

(A) The single office may require the owner of real property to provide, at the owner's expense and as a condition for development application approval, a drainage study for the total area to be ultimately developed.

(B) The drainage study must be in accordance with the Drainage Criteria Manual.

(C) If a drainage study is required under this Section, the single office may not accept for review a development application for any portion of the proposed development until the single office has received the required drainage study.

§ 30-4-32 SINGLE OFFICE AUTHORIZED TO REQUIRE EROSION HAZARD ZONE ANALYSIS.

(A) The single office may require the owner of real property to provide, at the owner's expense and as a condition for development application approval, an analysis to establish the erosion hazard zone if the proposed development is:

(1) within 100 feet of the centerline of a waterway with a drainage area of 64 acres or greater; or

(2) located where significant erosion is present.

(B) The erosion hazard zone analysis must be in accordance with the Drainage Criteria Manual.

(C) If an erosion hazard zone analysis is required under this section, the single office may not accept for review a development application for any portion of the proposed development until the single office has received the required erosion hazard zone analysis.

§ 30-4-33 FLOODPLAIN MAPS, DELINEATION, AND DEPICTION.

(A) The director shall designate and maintain official floodplain maps.

(B) If an official floodplain map is not delineated, the owner of property to be developed shall calculate the boundaries of the 100-year floodplain in accordance with the Drainage Criteria Manual and submit the calculation to the single office for approval.

(C) If the single office determines that FEMA regulations require a submission to the agency of a request for a flood insurance rate map revision, the single office may require that the revision request to FEMA be submitted by the owner of property to be developed.

(D) A person who files a development application shall depict, as applicable:

(1) on a preliminary plan or subdivision construction plan:

(a) a 100-year floodplain;

(b) a FEMA floodplain; and

(c) a drainage easement or proposed drainage easement;

(2) on a final plat:

(a) a drainage easement; and

(b) a portion of a FEMA floodplain that is outside a drainage easement.

(E) If a portion of a FEMA floodplain is outside a drainage easement, the owner of property to be developed shall, on a final plat:

(1) identify the portion of the FEMA floodplain that is outside the drainage easement, including the community and panel number of the flood insurance rate map; and

(2) include a note that:

(a) refers the reader to federal and local regulations governing development in a FEMA floodplain;

C3/165

(b) states that flood insurance may be required; and
(c) describes efforts to revise the flood insurance rate map.

ARTICLE 3. REQUIREMENTS FOR APPROVAL.

§ 30-4-61 CRITERIA FOR APPROVAL OF DEVELOPMENT APPLICATIONS.

(A) A development application may not be approved unless:

(1) the proposed development application demonstrates sufficient capacity for the design flood, as determined under the Drainage Criteria Manual;

(2) each proposed improvement is sufficiently strong to resist:

(a) external pressure caused by earth or building; and

(b) internal pressure or abrasion caused by water or debris;

(3) the proposed grades will not permit water to gather in a pool that may become stagnant, excluding variable pools in creek beds as a result of natural channel design;

(4) temporary and permanent measures to control erosion are sufficient to minimize siltation of the waterway, as determined under the Environmental Criteria Manual; and

(5) the proposed development:

(a) will not result in additional adverse flooding impact on other property;

(b) except as provided by Subsection (B), to the greatest extent feasible preserves the natural and traditional character of the land and the waterway located within the 100-year floodplain;

(c) except as provided by Subsection (C), includes on-site control of the two-year peak flow, as determined under the Drainage Criteria Manual and the Environmental Criteria Manual;

(d) will not result in additional erosion impacts on other property; and

(e) locates all proposed improvements outside the erosion hazard zone, unless protective works are provided as prescribed in the Drainage Criteria Manual.

(B) A development application that proposes floodplain modification shall comply with Section 30-5-364 (*Floodplain Modification*).

(C) A proposed development may provide off-site control of the two-year peak flow if the off-site control does not cause:

(1) an adverse water quality impact from increased in-stream peak flow; or

(2) streambank erosion.

§ 30-4-62 CERTIFICATE OF PROFESSIONAL ENGINEER REQUIRED FOR CERTAIN ALTERATIONS AND IMPROVEMENTS.

(A) The single office may not accept a plan or specification for a proposed alteration or improvement of a bed or bank of a waterway unless the plan or specification is accompanied by a certificate bearing the seal of a Texas professional engineer certifying that:

(1) the hydraulic and structural design is adequate; and

(2) the proposed alteration or improvement complies with the ordinances of the city and county, the Drainage Criteria Manual, and the laws of this state.

(B) Subsection (A) does not prohibit the single office from accepting a plan or specification for a minor alteration or improvement that, in the judgment of the single office, does not require certification by a Texas professional engineer.

§ 30-4-63 APPROVAL BY SINGLE OFFICE OF CERTAIN PERMITS AND CERTIFICATES.

C3/164

If a development application requires the completion or partial completion of a drainage improvement before a building may be constructed on a lot, a building permit, certificate of compliance, or development permit may not be issued for the lot unless the single office approves the issuance.

§ 30-4-64 DESIGN AND CONSTRUCTION OF DRAINAGE FACILITIES AND IMPROVEMENTS.

The design and construction of a drainage facility or improvement must:

(1) be in accordance with the Drainage Criteria Manual; and

(2) provide for maintenance and protection from erosion in accordance with the Environmental Criteria Manual.

§ 30-4-65 ENCLOSED STORM DRAINS, BRIDGES, AND CULVERTS.

(A) The single office must approve the plans and specifications for a storm drain, bridge, or culvert.

(B) The county's Transportation and Natural Resources Department or the city manager may inspect the construction of each storm drain, bridge, or culvert.

ARTICLE 4. RESPONSIBILITIES OF OWNER OR DEVELOPER.

§ 30-4-151 STORMWATER CONVEYANCE AND DRAINAGE FACILITIES.

(A) The owner or developer of property to be developed is responsible for the conveyance of all stormwater flowing through the property, including stormwater that:

(1) is directed to the property by other developed property; or

(2) naturally flows through the property because of the topography.

(B) Future upstream development shall be accounted for as determined under the Drainage Criteria Manual.

(C) If the construction or improvement of a storm drainage facility is required along a property line that is common to more than one property owner, the owner proposing to develop the property is, at the time the property is developed, responsible for each required facility on either side of the common property line.

(D) The responsibility of the owner proposing to develop the property includes the responsibility to dedicate or obtain the dedication of any right-of-way or easement necessary to accommodate the required construction or improvement of the storm drainage facility.

(E) If an owner of property proposes to develop only a portion of that property, a stormwater drainage facility to serve that portion of the property proposed for immediate development or use is required, unless the platting official determines that construction or improvement of a drainage facility outside that portion of the property to be developed is essential to the development or use of the property to be developed.

(F) The owner or developer shall provide adequate off-site drainage improvements to accommodate the full effects of the development. The city or county may assist the owner or developer in the acquisition of an interest in property necessary to provide an off-site improvement, if the owner or developer:

(1) by affidavit, certifies that a bona fide attempt to provide the off-site drainage improvements has not been successful; and

(2) provides an adequate guarantee that the owner or developer will:

(a) finance the entire cost of acquiring the necessary property interest; and

(b) retain full responsibility for construction of the required off-site improvement.

§ 30-4-152 DEDICATION OF EASEMENTS AND RIGHTS-OF-WAY.

C3/164

(A) The owner of real property proposed to be developed shall dedicate to the public an easement or right-of way for a drainage facility, open or enclosed, and stormwater flow to the limits of the 100-year floodplain, as prescribed in the Drainage Criteria Manual.

(B) An easement or right-of-way required by Subsection (A) must be of sufficient width to provide continuous access for the operation, maintenance, or repair of a drainage facility as prescribed in the Drainage Criteria Manual.

(C) The owner of the property shall dedicate any additional easement or right-of-way that is necessary to allow continuous access for the operation, maintenance, or rehabilitation of a drainage facility.

(D) A part of a lot or tract of land that is located in an easement or right-of-way required by this section may be included as part of the area of the lot or tract of land in the calculation of density or impervious cover.

§ 30-4-153 DETENTION BASIN MAINTENANCE AND INSPECTION.

(A) In this section:

(1) COMMERCIAL DEVELOPMENT means all development other than Residential Development.

(2) COMMERCIAL BASIN means a required detention basin or appurtenance that receives stormwater runoff from a Commercial Development.

(3) DCM STANDARDS means the provisions in the Drainage Criteria Manual regarding maintenance of a required detention basin or appurtenance.

(4) RESIDENTIAL DEVELOPMENT means development of two dwelling units or less per lot.

(5) RESIDENTIAL BASIN means a required detention basin or appurtenance that receives stormwater runoff from a Residential Development.

(B) The record owner of a commercial development shall maintain the commercial basin serving the commercial development in accordance with the DCM standards, whether or not the commercial basin is located on the same property as the commercial development. The record owner shall provide the City proof of the right to access and maintain the commercial basin if it is not located on the same property as the commercial development.

(C) If more than one commercial development is served by a single commercial basin, the record owners of the commercial basin and all commercial developments served by the commercial basin shall be jointly and severally responsible for maintenance of the commercial basin in accordance with the DCM standards.

(D) Alternative maintenance arrangements are authorized as follows:

(1) The director may authorize an alternative arrangement for maintenance of a commercial basin in accordance with the DCM standards. If an alternative arrangement is approved by the director, the city attorney shall determine whether an agreement is necessary; the agreement must be approved by the city attorney and filed of record.

(2) The executive manager of the Travis County Transportation and Natural Resources Department may authorize an alternative arrangement for maintenance of a residential basin in accordance with the DCM standards. If an alternative arrangement is approved by the executive manager, the county attorney shall determine whether an agreement is necessary; the agreement must be approved by the county attorney and filed of record.

(E) The City shall inspect each commercial basin that is not a subsurface basin at least once every three years to ensure that the commercial basin is being maintained in accordance with the DCM standards, but will not inspect basins maintained by the County under Subsection (H). If the commercial basin fails inspection requiring an additional inspection, the director may charge a re-inspection fee.

C3/168

(F) The record owner of a subsurface commercial basin must provide the Watershed Protection Department with a maintenance plan and an annual report from a registered engineer verifying that the basin is in proper operating condition.

(G) The record owner of a residential development shall maintain the residential basin serving the residential development in accordance with the DCM standards, whether or not the residential basin is located on the same property as the residential development. The record owner may assign maintenance responsibility to a duly established Homeowner's Association upon written approval by the executive manager of the Travis County Transportation and Natural Resources Department. The record owner of a subsurface residential basin must provide the Travis County Transportation and Natural Resources Department with a maintenance plan and an annual report from a registered engineer verifying that the basin is in proper operating condition.

(H) The county shall maintain a detention basin or appurtenance that is an integral part of a county road.

(I) Section 30-5-231 *(Water Quality Control Maintenance and Inspection)* provides for maintenance of water quality controls.

draft

C2 1 69

AFFORDABILITY IMPACT STATEMENT
NEIGHBORHOOD HOUSING AND COMMUNITY DEVELOPMENT
CITY COUNCIL AGENDA: PENDING CASE NUMBER: C2O-2013-017

PROPOSED CODE AMENDMENT:	PROPOSED: WATERSHED PROTECTION ORDINANCE
IMPACT ON REGULATORY BARRIERS TO HOUSING DEVELOPMENT	☒ INCREASE ☐ DECREASE ☐ NO IMPACT THE PROPOSED ORDINANCE INCREASES REGULATORY BARRIERS BY CHANGING THE AREA OF DRAINAGE THAT REQUIRES STREAM BUFFERING IN SUBURBAN WATERSHEDS FROM 320 ACRES DOWN TO 64 ACRES, INCREASING THE ACREAGE IMPACTED BY NEW BUFFERING REGULATIONS. APPROXIMATELY 106,085 ACRES OF UNDEVELOPED LAND WILL BE SUBJECT TO NEW BUFFERING REQUIREMENTS. HOWEVER, ACCORDING TO WPD ANALYSIS, ONLY ABOUT 11% OF DEVELOPMENTS, OR ABOUT 13,000 ACRES, WOULD HAVE A POTENTIAL REDUCTION IN THE AMOUNT OF IMPERVIOUS COVER ALLOWED. UNDER THE SAME ANALYSIS, ABOUT 19% OF PROPERTIES, OR ABOUT 57,000 ACRES WOULD HAVE A POTENTIAL GAIN IN THE AMOUNT OF IMPERVIOUS COVER ALLOWED. AN ANALYSIS OF AHFC'S FRONTIER AT MONTANA SUBDIVISION SHOWED THAT AT LEAST 25 OF 81 LOTS WOULD HAVE BEEN WITHIN THE PROPOSED BUFFER. THEREFORE, A DIFFERENT LAYOUT, HOUSING PRODUCT, OR ENTIRE SITE WOULD HAVE HAD TO HAVE BEEN SELECTED TO MAINTAIN AN EQUIVALENT NUMBER OF AFFORDABLE UNITS. ON THE OTHER HAND, THE PROJECT'S DESIGN PLACED FENCES AND HOMES IN VERY CLOSE PROXIMITY TO THE CREEK BANKS, LEFT LITTLE ROOM FOR STABILIZING RIPARIAN VEGETATION, AND DID NOT PROVIDE TRAIL CONNECTIVITY, COMMUNITY OPEN SPACE, AND OTHER FEATURES AFFORDED BY MORE GENEROUS CREEK BUFFERS. THIS CASE STUDY UNDERSCORES THE COMPLEXITY OF THE DECISIONS TO BE MADE ABOUT SHORT AND LONG-TERM COSTS AND BENEFITS.
LAND USE / ZONING OPPORTUNITIES FOR AFFORDABLE HOUSING DEVELOPMENT	☐ INCREASE ☒ DECREASE ☐ NO IMPACT THE PROPOSED AMENDMENT WOULD ELIMINATE THE WATER QUALITY TRANSITION ZONE AND CALCULATE IMPERVIOUS COVER ON A GROSS SITE AREA BASIS FOR SUBURBAN

	WATERSHEDS. THIS MEANS LARGER SITES WOULD IN GENERAL HAVE MORE FLEXIBILITY TO ADD IMPERVIOUS COVER WITHIN THE UPLANDS TO OFFSET THE NEW BUFFER. OTHER PROVISIONS SUCH AS "BUFFER AVERAGING" AND ADDITIONAL USES WITHIN THE BUFFER (E.G., WATER QUALITY CONTROLS AND WASTEWATER LINES) PROVIDE DEVELOPMENT FLEXIBILITY AS WELL. SMALLER, INFILL TYPE DEVELOPMENTS COULD BE MORE NEGATIVELY IMPACTED AND WOULD NOT BE ABLE TO AS EASILY MITIGATE THE LOSS DUE TO THE SMALLER SITE AREA. AGAIN, IN OUR EXAMPLE OF AN ACTUAL DEVELOPMENT, 25 OF 81 LOTS COULD HAVE POTENTIALLY BEEN LOST BY THE ADDITIONAL BUFFERING REQUIREMENTS.
IMPACT ON COST OF DEVELOPMENT	☒ INCREASE ☐ DECREASE ☐ NO IMPACT THE PROPOSED EROSION HAZARD ZONE (EHZ) ANALYSIS COULD IMPACT COSTS TO DEVELOPMENT. THERE IS NO ANALYSIS OF EROSION POTENTIAL REQUIRED AT THIS TIME. THE EHZ ANALYSIS COULD BE STRAIGHTFORWARD AND COST $100-$200 FOR A LETTER TO BE GENERATED BY A CIVIL ENGINEER. IF THE ZONE REQUIRES ADDITIONAL ANALYSIS AND ARMORING, THE COST OF DESIGN AND INSTALLATION COULD BE A RANGE OF $1,000 - $20,000+ PER AREA DEPENDING ON THE MITIGATION NEEDED. THIS ANALYSIS AND POTENTIAL MITIGATION WOULD INCREASE DEVELOPMENT COSTS AND NEGATIVELY IMPACT HOUSING AFFORDABILITY. THE COST TO NOT PERFORM THIS ANALYSIS CAN LEAD TO SIGNIFICANT PUBLIC AND PRIVATE COSTS TO ADDRESS THE UNDERMINING OF FENCES, YARDS, AND STRUCTURES DUE TO STREAM CHANNEL EROSION. (SEE MORE DISCUSSION ON HISTORIC COSTS BELOW.)
IMPACT ON PRODUCTION OF AFFORDABLE HOUSING	☐ INCREASE ☒ DECREASE ☐ NO IMPACT A WPD ANALYSIS DEMONSTRATES, THE MAJORITY OF THE ACREAGE SUBJECT TO THE PROPOSED ORDINANCE WOULD SEE NO CHANGE OR A POTENTIAL INCREASE IN AVAILABLE IMPERVIOUS COVER ENTITLEMENTS. A WPD ANALYSIS OF 90 EXISTING S.M.A.R.T. HOUSING MULTI-FAMILY PROJECTS REVEALED ONLY 9 WOULD HAVE BEEN SUBJECT TO THE PROPOSED BUFFERS AND OF THOSE ONLY 2 HAD A

C3/11

	PROPOSED BUFFER THAT WOULD HAVE SIGNIFICANTLY IMPACTED THE DEVELOPMENT. SOME AFFORDABLE DEVELOPMENTS COULD FACE A DECREASE IN HOUSING YIELD BY ADHERING TO THE PROPOSED TRIGGERS FOR THE BUFFERING. SMALLER INFILL PROJECTS WOULD BE MORE NEGATIVELY IMPACTED DUE TO SMALLER LAND AREA AVAILABLE TO RE-CONFIGURE. A POTENTIAL OUTCOME OF THE ORDINANCE WILL BE TO REDIRECT DEVELOPMENT AND DENSITY TO UPLAND AREAS AND PROPERTIES THAT ARE NOT ADJACENT TO SENSITIVE WATERWAYS AND FLOODPLAINS, WHICH IS AN OBJECTIVE OF THE IMAGINE AUSTIN COMPREHENSIVE PLAN.
ALTERNATIVE LANGUAGE TO MAXIMIZE AFFORDABLE HOUSING OPPORTUNITIES:	NHCD RECOMMENDS WPD CONSIDER INCORPORATING ADMINISTRATIVE VARIANCES TO THE ORDINANCE TO ALLOW DEVELOPMENTS FLEXIBILITY AND TO AVOID THE ADDITIONAL COSTS ASSOCIATED WITH OBTAINING BOARD AND COMMISSION VARIANCES.
OTHER HOUSING POLICY CONSIDERATIONS:	THE PURPOSE OF THE WATERSHED PROTECTION ORDINANCE IS TO IMPROVE CREEK AND FLOODPLAIN PROTECTION; PREVENT UNSUSTAINABLE PUBLIC EXPENSE ON DRAINAGE SYSTEMS; SIMPLIFY DEVELOPMENT REGULATIONS WHERE POSSIBLE; AND MINIMIZE THE IMPACT ON THE ABILITY TO DEVELOP LAND. IT ALSO SEEKS TO BETTER BALANCE THE ENVIRONMENTAL PROTECTION LONG AFFORDED TO WESTERN WATERSHEDS TO THOSE OF THE EAST. THESE EASTERN CREEKS ARE AMONG THE MOST EROSIVE IN AUSTIN'S JURISDICTION. THE CITY'S STREAM RESTORATION PROGRAM HAS SPENT OVER $30 MILLION TO REPAIR EROSION PROBLEMS—VIRTUALLY ALL OF WHICH WOULD HAVE BEEN PREVENTED HAD THE DEVELOPMENT PROTECTED BEEN ADEQUATELY SET BACK FROM CREEKS. AND THIS EXPENDITURE REPRESENTS ONLY A FRACTION OF THE REMAINING, UNRESOLVED PROBLEMS CREATED IN THE PAST. THE HEADWATERS BUFFERS AND EROSION HAZARD ZONE PROVISIONS OF THE ORDINANCE ARE CENTRAL TO IMPLEMENTING THESE COST-SAVING MEASURES. HOUSING PROJECTS BUILT IN CLOSE PROXIMITY TO EROSIVE CREEK BANKS WILL LIKELY CREATE BOTH NUISANCE FOR FUTURE HOMEOWNERS AS WELL AS POTENTIAL PUBLIC AND PRIVATE COSTS.

C3/12

	WITH ALLOWANCES FOR TRAILS, COMMUNITY GARDENS, AND PARKS, STREAM BUFFERS ALSO SERVE AS A VALUABLE OPPORTUNITY TO PROVIDE CONNECTIVITY AND COMMUNITY OPEN SPACE FOR HOUSING PROJECTS. THIS HELPS TO IMPLEMENT THE HEALTHY AUSTIN AND GREEN INFRASTRUCTURE PRIORITY PROGRAMS OF IMAGINE AUSTIN, IN ADDITION TO SUSTAINABLY MANAGING OUR WATER RESOURCES.
DATE PREPARED:	AUGUST , 2013

DIRECTOR'S SIGNATURE: _____

ELIZABETH A. SPENCER

C3/173

RESOLUTION NO. 20110113-038

WHEREAS, the City of Austin desires that future development activity not increase impacts to public and private property from flooding and stream erosion or create additional public expense and environmental degradation; and

WHEREAS, broad, alluvial floodplains are more likely to be modified or channelized due to their unique topography and soil types; and

WHEREAS, existing regulations need to be reviewed and amended to be sure they provide sufficient protection of headwater streams, maintain creek health, control infrastructure maintenance costs, and take advantage of opportunity for greenway and trail connectivity; and

WHEREAS, the 2001 Watershed Protection Master Plan, approved by Council, called for improvements to stream setback regulations and drainage design criteria; **NOW, THEREFORE,**

BE IT RESOLVED BY THE CITY COUNCIL OF THE CITY OF AUSTIN:

The City Manager is directed to draft, process, and bring forward for Council consideration necessary Land Development Code amendments to improve stream buffer requirements, protect headwaters and streambanks, preserve floodplains, and improve stormwater controls to accomplish the following goals:

1. Improve stream buffer requirements, including critical headwater areas, to protect water quality and reduce erosion, flooding, and long-range costs for infrastructure maintenance.

C3/14

2. Promote, encourage and/or require the preservation and restoration of floodplains and stream buffers as well as the beneficial re-purposing of mining quarries.

3. Explore opportunities to encourage a development pattern that better protects public and private property, preserves floodplains, creeks and open spaces, and provides access and connectivity with greenways and trails.

4. Improve permanent stormwater controls to better moderate runoff and help reduce streambank erosion.

5. Explore better ways to regulate the modification of floodplains, including options for off-site mitigation for developments in areas that are planned for higher density developments.

6. Simplify development regulations where possible and minimize the impact of any changes on individual and collective abilities to develop land.

7. Work in coordination with Travis County and neighboring communities to develop the above changes.

ADOPTED: January 13 , 2011 **ATTEST:** Shirley A. Gentry

Shirley A. Gentry
City Clerk