

## **ORDINANCE NO. 24-07-18-05**

**AN ORDINANCE OF THE CITY COUNCIL OF LAGO VISTA, TEXAS,  
AMENDING THE CODE OF ORDINANCES BY REPEALING THE  
EXISTING SITE DEVELOPMENT REGULATIONS IN CHAPTER 10.5,  
REENACTING NEW SITE DEVELOPMENT REGULATIONS AS  
CHAPTER 3.5, AND AMENDING SECTIONS 3.1401, 3.1402, AND 3.501 OF  
CHAPTER 3, SECTION 6.10 OF CHAPTER 10, AND SECTION 7 OF  
CHAPTER 11.**

**WHEREAS**, the City of Lago Vista, Texas is a Home Rule City; and

**WHEREAS**, the City Council of the City of Lago Vista has previously established provisions within Chapter 10.5 of the Lago Vista Code of Ordinances to establish procedural and substantive requirements applicable to multifamily and non-residential development; and

**WHEREAS**, the Building and Standards Commission and the staff have become aware of desirable improvements to those procedural requirements, specifically as it relates to the procedures for obtaining relief from any of the substantive requirements; and

**WHEREAS**, the undesirable procedures for obtaining variance relief from the site development requirements in Chapter 10.5, in the absence of a Planned Development District (PDD), have been revealed by an application from Pedernales Electric Cooperative, Inc. (PEC) for a new electrical substation to be located at 20204 Ming Trail immediately adjacent to their existing electrical substation at 20304 Alfalfa Drive; and

**WHEREAS**, the Building and Standards Commission of the City of Lago Vista has undertaken an extensive review of the site development regulations at their special call meeting on July 8, 2024; and

**WHEREAS**, that extensive review included taking notice of the lack of any relationship between the site development regulations and the subdivision regulations in Chapter 10, and the more direct relationship between the site development and the building regulations in Chapter 3; and

**WHEREAS**, the Building and Standards Commission of the City of Lago Vista has forwarded a recommendation to the City Council to amend the site development regulations by repealing Chapter 10.5 of the Lago Vista Code of Ordinance and reenacting amended site development regulations as Chapter 3.5 as described below; and

**WHEREAS**, that relocation of the site development regulations to Chapter 3.5 requires minor amendments to Sections 3.1401, 3.1402 and 3.501 of Chapter 3, Section 6.10 of Chapter 10, and Section 7 of Chapter 11 to avoid cross-referencing errors in the Lago Vista Code of Ordinances; and

**WHEREAS**, the City Council desires to amend the Lago Vista Code of Ordinances as described below.

**NOW, THEREFORE, BE IT ORDAINED BY THE CITY COUNCIL OF THE CITY OF LAGO VISTA, TEXAS, THAT:**

**SECTION 1. FINDINGS OF FACT.** All of the above and foregoing recitals are hereby found to be true and correct legislative findings of the City and are incorporated herein as findings of fact.

**SECTION 2. AMENDMENT.** The City Council of the City of Lago Vista, Texas, does hereby repeal Chapter 10.5 of the Code of Ordinances and reenact an amended version as Chapter 3.5 as shown in Exhibit “A,” amend Sections 3.1401, 3.1402 and 3.501 of Chapter 3 as shown in Exhibit “B,” amend Section 6.10 of Chapter 10 as shown in Exhibit “C,” and amend Section 7 of Chapter 11 as shown in Exhibit “D.”

**SECTION 3. REPEALER.** All ordinances, orders or resolutions heretofore passed and adopted by the City Council of the City of Lago Vista, Texas, are hereby repealed to the extent said ordinances, orders or resolutions or parts thereof are in conflict herewith.

**SECTION 4. SEVERABILITY CLAUSE.** If any section, subsection, article, paragraph, sentence, clause, phrase or word in this Ordinance is for any reason held to be invalid or unconstitutional by a court of competent jurisdiction, such holding shall not affect the validity of the remaining portions of this Ordinance, and the City Council hereby declares it would have passed such remaining portions of this Ordinance despite such invalidity, which remaining portions shall remain in full force and effect.

**SECTION 5. CODIFICATION AND PUBLICATION.** The City Secretary is hereby directed to record and publish the attached amendments to the City’s Code of Ordinances as authorized by Section 52.013 of the Texas Local Government Code.

**SECTION 6. EFFECTIVE DATE.** This Ordinance shall take effect immediately upon its passage and publication in accordance with the provisions of the Texas Local Government Code.

**SECTION 6. OPEN MEETINGS.** It is hereby officially found and determined that the meeting at which this ordinance is passed was open to the public as required and that public notice of the time, place, and purpose of said meeting was given as required by the Open Meetings Act, Chapter 551 of the Texas Government Code.

**AND, IT IS SO ORDERED.**

**PASSED AND APPROVED this 18th day of July 2024.**



Kevin Sullivan, Mayor



ATTEST:

Lucy Aldrich

Lucy Aldrich, City Secretary

On a motion by Councilor Roberts, seconded by Councilor Marion, the above and foregoing ordinance was passed and approved.

**EXHIBIT “A”**

**CHAPTER 3.5**

**SITE DEVELOPMENT**

**Sec 3.5.101 Definitions**

The following words, terms and phrases, when used in this article, shall have the meanings ascribed to them in this section, except where the context clearly indicates a different meaning. Words used in the present tense include the future tense. Words used in the plural number include the singular, and words in the singular include the plural. The word “shall” is always mandatory. The word “herein” means in this article. The word “regulations” means the provisions of any applicable ordinance, rule, regulation or policy. The word “person” means any human being or legal entity and includes a corporation, a partnership, and an incorporated or unincorporated association. The words “used or occupied” as applied to any land or building shall be construed to include the words intended, arranged, or designed to be used or occupied.

*Berm*. A landscaped strip of ground used as a visual screen, constructed so that it is no more than six (6) feet above grade with a minimum of three (3) feet of horizontal distance for each one (1) foot of height.

*Bluff*. An abrupt vertical change in topography of more than twenty (20) feet with an average slope steeper than three (3) feet of rise for one (1) foot of horizontal travel.

*Centerline of Waterway*. The centerline of the waterway refers to existing topographically-defined channels. If not readily discernible, the centerline shall be determined by the accepted drainage calculations.

*City*. The City of Lago Vista, Texas.

*City Council*. The city council of the City of Lago Vista, Texas.

*Crest of Bluff*. A line on the ground parallel to and at the top of a bluff, beyond which the average slope is no steeper than one (1) foot of rise in two (2) feet of travel, for a horizontal distance of not less than forty (40) feet.

*Developer*. A person who improves land, primarily through the construction of subdivision or project infrastructure and structures.

*Development*. Buildings, utilities, roads and other structures; construction; and excavation, dredging, grading, filling and clearing or removing vegetation for the purpose of constructing permanent structures on the property.

*Development Plan*. A scaled drawing representing an area of land to be improved/developed and indicating the legal boundary of said property and the nature and extent of all existing and proposed improvements to said project.

Easement. An interest in land granted to the city, to the public generally, and/or to utilities, for drainage ways or for installing or maintaining utilities across, over and under private land, together with the right to enter thereon with machinery and vehicles necessary for the maintenance of said easements or utilities.

Engineer. A person duly authorized under the provisions of the Texas Engineering Registration Act, as heretofore or hereafter amended, to practice the profession of engineering.

Extraterritorial Jurisdiction. That territory outside the corporate limits of the City of Lago Vista which is within the jurisdiction of the city by virtue of the Municipal Annexation Act, Vernon's Annotated Civil Statutes, Article 970a.

Impervious Cover. Roads, parking areas, buildings, and other impermeable construction covering the natural land surface including but not limited to: all streets, driveways, buildings and structures within a development.

Landscaped Area. An area which has been enhanced by the use of plant material, planters, paving blocks, landscaping rock or water but not including poured concrete or asphalt.

Lot. Any legally platted lot, tract or parcel of land situated wholly or partially within the corporate limits of the City of Lago Vista, Texas.

Multifamily. Any development having more than two residential units on a single lot.

Plant Material. Grass, trees, shrubs, flowers, vines, groundcover or any other living matter.

Setback Distance. The minimum horizontal distance between the prop line and the front wall of any projection of a building, excluding uncovered steps, uncovered balconies, uncovered porches, and roof overhangs.

Shoreline. The edge of the water during normal level or flow conditions. In the case of Lake Travis, it is the six hundred eighty-one (681) foot MSL contour. In the case on intermittent streams, it is the centerline of the waterway.

Site. Any legally platted lot situated wholly or partially within the corporate limits of the City of Lago Vista, Texas.

Street. The entire width between the boundary lines of every way publicly or privately maintained when any part thereof is open to the use of the public for purposes of vehicular travel.

Structure. Anything constructed or erected which requires location on or in the ground or attached to anything having a location on or in the ground that is of a permanent nature and such is a constructed or an erected object that is positioned on private property or in street right-of-way of the city.

Wastewater Disposal System. Any publicly or privately owned system for the collection, treatment, and disposal of sewage that is operated in accordance with the terms and conditions of a valid waste discharge permit issued by the Texas Natural Resource Conservation Commission or appropriate regulatory agency.

Water Supply System. The water facility infrastructure for the collection, treatment, storage and distribution of potable water from the source of supply to one or more consumers. The water system shall be designed in accordance with and approved by the Texas Natural Resource Conservation Commission and the City of Lago Vista.

### **Sec 3.5.102 Site Development Plan Required**

A site development plan as provided for here and meeting the requirements of this article is required prior to the development or construction of any improvements on any lot that is zoned other than single-family residential or two-family residential, or that is intended for any use for any purpose or occupancy other than for single-family or two-family residential occupancy. A site development plan meeting the requirements of this article is not required in situation in which a single-family residential or two-family residential structure is to be constructed on any lot or other parcel of land that is zoned other than single-family residential or two-family residential.

### **Sec 3.5.103 Purpose and Applicability**

- (a) **Purpose.** The site development plan provides detailed graphic information and associated text indicating property boundaries, easements, land use, streets, utilities, drainage, off-street parking, lighting, signage, landscaping, vehicle and pedestrian circulation, open spaces, and general conformance with the master plan and ordinances of the city.
- (b) **Applicability.** This article shall apply to every person owning and/or proposing to develop a legally platted lot for any development other than single-family or a residential duplex within the City of Lago Vista. Multifamily or commercial lots located within planned development districts shall not be exempt from the requirements of this article.
- (c) **Other Requirements.** Additional and related local ordinance requirements include, but are not limited to, the provisions within Chapter 3, Chapter 10, Chapter 11, Chapter 13, Chapter 14, and the Technical Construction Standard Specifications (TCSS) adopted as Ordinance Number 19-02-21-02 as amended. The TCSS is incorporated by reference herein and shall be deemed to have the same force and effect as if set forth in full herein.

### **Sec 3.5.104 Format And Content**

- (a) **Format.** The site development plan shall be submitted digitally in a format that can be conveniently printed at a scale sufficient to meet the informational requirements herein.
- (b) **Content.** The site plan shall include all of the land proposed to be developed or improved, and any off-site improvements required to accommodate the project. The site development plan shall contain, or have attached thereto:
  - (1) A cover sheet showing:
    - (A) Names, addresses and phone numbers of the record owner or developer, and authorized agents including the architect, engineer, landscape architect, and surveyor (those applicable);
    - (B) The proposed name of the project;
    - (C) A location map showing the relation of the project to streets and other prominent features in all directions for a radius of at least one (1) mile using a scale that legibly depicts those same prominent features;
    - (D) The owner's name, address (including city, state and zip code), deed or plat reference and property lines of property within two hundred (200) feet of the lot boundaries as determined by the most recent tax rolls;

- (E) Certifications and signature blocks as required by the city;
- (F) The total acreage of the property to be developed;
- (G) The zoning district as defined by the current city zoning ordinance.

(2) An existing conditions plan, showing:

- (A) Boundary of existing zoning districts, if applicable;
- (B) The existing property lines, including bearings and distances, of the land being developed or improved. Property lines shall be drawn sufficiently wide to provide easy identification;
- (C) The location of existing structures and improvements, if applicable;
- (D) All trees except Ashe junipers ten (10) inches and diameter and greater when measured forty (40) inches above the adjacent grade within the limits of the proposed on-site and/or off-site improvements;
- (E) Centerline of water courses, creeks, existing drainage structures and other pertinent data shall be shown;
- (F) Lines delineating the regulatory 100- year floodplain, if applicable;
- (G) Topographic data indicating one (1) foot contour intervals. The contoured area shall extend outward from the property boundary for a distance equal to twenty-five percent (25%) of the distance across the tract, but not fewer than fifty (50) feet nor more than two hundred (200) feet;
- (H) The locations, sizes and descriptions of all existing utilities, including but not limited to: sewer lines, lift stations, sewer and storm sewer manholes, water lines, water storage tanks, and wells within the property, and/or adjacent thereto. Existing overhead and underground electric utilities shall also be shown;
- (I) The location, dimensions, names and descriptions of all existing or recorded streets, alleys, reservations, easements, building setbacks or other public rights-of-way within the property, intersecting or contiguous with its boundaries or forming such boundaries, as determined from existing deed and plat records. The existing rights-of-way width, street pavement width, bar ditches, driveways on adjacent property and driveways located across the street of any boundary street to the property shall also be shown;
- (J) Location of city limit lines and/or outer border of the city's extraterritorial jurisdiction, as depicted on the city's most recent official map, if either traverse the lot or is contiguous to the lot boundary.

(3) An Erosion and Sedimentation Control Plan, showing:

- (A) Proposed fill or other structure elevating techniques, levees, channel modifications and detention facilities;

- (B) Existing and proposed topographic conditions with vertical intervals not greater than one (1) foot referenced to a United States Geological Survey or Coastal and Geodetic Survey benchmark or monument;
- (C) The location, size, and character of all temporary and permanent erosion and sediment controls with specifications detailing all on-site erosion control measures which will be established and maintained during all periods of development and construction;
- (D) Contractor staging areas, vehicle access areas, temporary and permanent spoils storage areas;
- (E) A plan for restoration for the mitigation of erosion in all areas disturbed during construction;
- (F) All temporary and permanent erosion and sedimentation controls within the city shall be designed in accordance with the LCRA Lake Travis Nonpoint Source Pollution Control Ordinance Technical Manual, as amended.

(4) A site plan, showing all visible improvements to the land, including:

- (A) The location, dimensions, square footage, height, and intended use of existing and proposed buildings on the site;
- (B) Location, number and dimensions of existing and proposed parking spaces, distinguishing between standard, handicap and van handicap spaces, and calculation of applicable minimum requirements;
- (C) The location, type and dimensions of proposed driveways, signs and traffic control devices.

(5) A grading and drainage plan, showing:

- (A) A drainage area map delineating areas to be served by proposed drainage improvements;
- (B) Detailed design of all drainage facilities, including typical channel or paving section, storm sewers, detention ponds and other stormwater control facilities;
- (C) Accurate cross-sections, plan and profiles of every drainage improvement proposed in a public utility easement and/or public right-of-way;
- (D) Existing and proposed topographic conditions with vertical intervals not greater than one (1) foot referenced to a United States Geological Survey or Coastal and Geodetic Survey benchmark or monument;
- (E) Attendant documents containing design computations in accordance with the city subdivision ordinance and this article, and any additional information required to evaluate the proposed drainage improvements;
- (F) The City of Austin Drainage Criteria Manual, as amended (hereinafter the “Manual”) is hereby adopted, save and except the following:

- (i) Preface;
- (ii) Paragraphs 1.2.4.E.2 and 1.2.4.E.11;
- (iii) Paragraphs 1.2.7;
- (iv) Paragraphs 1.4.0;
- (v) Paragraphs 1.5.0.3, 1.5.0.1, 1.5.0.5 and 1.5.0.6;
- (vi) Paragraphs 8.2;
- (vii) Appendix D; and
- (viii) All references to the City of Austin, including its departments, boards or divisions shall be the same departments, boards or divisions with the City of Lago Vista. Where such departments, boards or divisions do not exist within the City of Lago Vista, such references shall be construed to mean the city engineer of Lago Vista or other representative authorized by the city council of the city to perform such functions for the city.

(G) All drainage systems and improvements shall conform to the provisions and requirements of the manual and good engineering practices and shall show conveyance to off-site drainageways, (for example, continuation of street bar ditch or natural drainageway);

(H) The site grading plan shall show and include the existing ground elevations and finish construction grades, including existing ground elevations for a minimum of one hundred feet (100') onto adjoining property, width of existing street right-of-way and existing pavement width;

(6) A utility plan showing:

- (A) The layout, size and specific location of proposed water mains and other related structures and in accordance with all current city standards, specifications and criteria for construction of water mains;
- (B) The location of proposed fire hydrants, valves, meters and other pipe fittings;
- (C) Design details showing the connection with the existing city water system;
- (D) The layout, size and specific location of the proposed wastewater lines, lift stations, and other related structures, and in accordance with all current city standards, specifications and criteria for construction of wastewater systems;
- (E) Plan and profile drawings for each line in public rights-of-way or public utility easements, showing existing ground level elevation at centerline of pipe, pipe size and flow line elevation at all bends, drops, turns, station numbers at fifty-foot intervals;
- (F) Detailed design for lift stations, special wastewater appurtenances, if applicable;

(G) Utility demand data, and other attendant documents, to evaluate the adequacy of proposed utility improvements, and the demand on existing city utilities.

(7) A landscape plan showing:

- (A) Compliance with all ordinances requiring landscaping;
- (B) The layout size and specific location of proposed sprinkler systems as designed by a licensed landscape irrigator;
- (C) The following maintenance note: The developer and subsequent owners of the landscaped property, or the manager or agent of the owner, shall be responsible for the maintenance of all landscape areas. Said areas shall be maintained so as to present a healthy, neat and orderly appearance at all times and shall be kept free of refuse and debris. All planted areas shall be provided with a readily available water supply and watered as necessary to ensure continuous healthy growth and development. Maintenance shall include the replacement of all dead plant material if that material was used to meet the requirements of applicable regulations.

(8) Construction details, showing (when applicable):

- (A) Structural retaining walls and/or detention outlet structures;
- (B) Storm sewer manhole and covers, typical channel sections, inlets, safety end treatments and headwalls;
- (C) Wastewater manholes and covers, cleanouts, grease traps, pipe bedding and backfill;
- (D) Water valves, water meters, fire hydrants, thrust blocks, backflow prevention and concrete encasement;
- (E) Driveways, curb and gutter, sidewalks, curb ramps, pavement sections and pavement repair;
- (F) Silt fence, rock berms, stabilized construction entrance, inlet protection;
- (G) Traffic controls when working in the public rights-of-way that comply with the Uniform Standards for Traffic Control Devices; and
- (H) Illumination structures.

(9) Each sheet shall have a legend identifying symbols, lines or other graphic representations.

**Sec 3.5.105 Standards and Specifications**

(a) Cuts and Fills Less Than Four (4) Feet. Cuts and fills of less than four (4) feet may be subject to the approval of the city manager or his/ her designee. No fill material of less than four (4) feet in depth shall be placed or be in such an amount so as to restrict the city from being able to access utility lines within an easement. Any cut more than three (3) feet in depth shall install a fence or screening device in accordance with the zoning ordinance.

(b) Cuts and Fills of Four (4) Feet or More. No fill on any building site shall exceed a maximum of eight (8) feet of depth, except for landscaping purposes. No cut of any building site shall be greater than eight (8) feet, except for structural excavation. Cuts and fills of four (4) feet or more shall require a soils report, prepared by a geotechnical engineer, with recommended embankment slopes and/or slope stabilization such as retaining walls. The geotechnical report shall also address that the adjacent property will not be impacted negatively by a cut or fill. The civil engineer shall address the drainage to and from the site and any permanent erosion controls required for the slope stability. Any cut more than three (3) feet in depth shall install a fence or screening device in accordance with the zoning ordinance. No fill material of less than four (4) feet in depth shall be placed or be in such an amount so as to restrict the city from being able to access utility lines within an easement.

(c) Streets, Driveways, Roadways, Parking Areas, Alleys and Sidewalks. Streets, roadways, alleys, and sidewalks shall conform to standards contained in the city's standards of construction of streets and drainage in the subdivision regulations and all other adopted regulations and standards. Also reference Chapter 11.

(1) Vehicular Access.

(A) Vehicular access to property from the public right-of-way shall be controlled in such a manner as to protect the traffic-carrying capacity and safety of the street upon which the property abuts and access is taken, ensuring that the public use and purpose of public rights-of-way is unimpaired as well as protect the value of the public infrastructure and adjacent property.

(B) A traffic impact analysis conducted by a qualified transportation engineer to determine the impact of a development on roads or streets shall be required for any use or combination of uses that will generate two hundred (200) or more vehicle trips per day.

(C) On arterial and collector streets, or if necessary for the safe and efficient movement of traffic, all accesses shall be designed and constructed with physical improvements and appropriate traffic control measures to assist or restrict turning movements, including, without limitation, acceleration or deceleration lanes, access islands, street medians, and signage, as may be required of the development if the city manager or their designee finds that they are necessary to preserve the safety or the current level of service of the existing street. The city manager or their designee shall determine the length and degree of the required access restriction measures for the property.

(2) If a traffic impact analysis is required, the site development plan must ensure that:

(A) Proposed access and egress points have reasonable sight distances;

(B) No inordinately adverse impact will result on the nearest intersections;

(C) No unsafe traffic circulation or pedestrian problems will result;

(D) Surrounding land uses and driveways are not inordinately adversely affected;

(E) Rights-of-way width, pavement width, and street design are adequate for the number of vehicle trips projected per day, so as not to overburden the street system.

(3) Driveways and Parking Areas.

- (A) The slope of a driveway shall not exceed twelve percent (12%) measured between the street end of the apron and the opposite end of the driveway.
- (B) Driveways shall not be located within two hundred (200) feet from the intersection of a collector street and an arterial street, or two (2) collector streets that are identified in the city's master plan.
- (C) Driveways and parking areas shall have an adequate base of compacted granular material and a wearing surface of hot mix asphalt, concrete, brickpavers, or reinforced concrete.
- (D) Driveway and pavement designs shall be determined by a qualified soils testing and pavement design registered professional engineer. Total flexible thickness design shall be based on soil type, traffic loading and a twenty (20) year minimum design life.
- (E) The number of parking spaces required shall conform to standards contained in the latest version of the zoning ordinance.
- (F) The number of off-street loading spaces shall conform to the latest version of the zoning ordinance.
- (G) Parking areas for bicycle racks shall be at the discretion of the developer.
- (H) Parking areas which necessitate backing out onto arterial streets or collector streets shall be prohibited.
- (I) On-street parking shall not be allowed.

(d) Water and Wastewater Systems. Water and wastewater systems shall conform to the latest versions of applicable ordinances.

(e) Landscaping. Landscaping shall conform to the following requirements:

- (1) All plant materials used for landscaping shall be of healthy stock, preferably native or naturalized, with low water requirements.
- (2) All areas which are not impervious cover shall be landscaped and a landscaping shall extend to the property lines.
- (3) Grass or groundcover may be installed in the rights-of-way contiguous to the site with the permission of the city or other relevant governmental authority. The owner of the site contiguous to the right-of-way shall be responsible for maintaining the grass or groundcover in the right-of-way.
- (4) Trees.
  - (A) All trees required to be planted to meet the minimum tree requirement shall be at least two (2) inches in diameter and located at least three (3) feet from any impervious cover.

(B) The site shall meet the type and number of trees to be planted, replaced or retained on the lot according to the latest version of the zoning ordinance.

(5) All traffic islands or peninsulas shall be landscaped. Grass or grand [ground] cover shall not exceed eighteen (18) inches in height.

(6) Except for landscaping in the rights-of-way, landscaped areas which are located adjacent to pavement shall be protected from vehicles with concrete curbs or concrete tire stops.

(7) Existing oak trees shall be preserved to the extent reasonable and feasible. A list of the trees to be planted, replaced, retained or removed shall be submitted with the site plan and must be approved by the city manager or their designee.

(8) Fifty percent (50%) of the landscaped areas must include living material. All disturbed areas must be re-seeded with grass, groundcover or similar living matter.

(9) All retaining walls, including but not limited to detention and/or filtration ponds, of three (3) feet or more shall require shrubbery and/or vines of healthy stock and of a minimum of two (2) feet in height immediately after planting in front of the retaining wall. All shrubbery and/or vines shall be planted and maintained so as to form a continuous, unbroken, solid, visual screen which will grow to the same height or more of the retaining wall.

(f) Drainage and Erosion Control. Drainage improvements and erosion control measures shall comply with applicable provisions of Articles 3.1100 and 3.1400 of Chapter 3 and Section 4.112 of Chapter 10 of the Code of Ordinances.

(g) Fences and Screening Devices. Fences and screening devices shall be installed, repaired and maintained according to the latest version of the zoning ordinance.

(h) Illumination. All outdoor or exterior lighting shall comply with Article 3.800 of Chapter 3.

(i) Pollution. Unless authorized by an appropriate governmental agency with powers superseding those of the city, there shall be no dumping or discharge of any waste, wastewater, chemicals, polluted liquids, toxic material, or any other substance which constitutes a known hazard to humans or animals, onto any property or into any waterway or stream, pond, or detention pond, during the development process or after its completion. During the development process, all developments shall have on-site, rigid, tamper-proof containers for the disposal of nonhazardous solid waste.

(j) Trash Storage and Recycling Areas. Trash storage and recycling areas for attached dwellings and all business and industrial buildings or uses shall be accommodated within the structure, or adequate area shall be included on site and indicated on a site plan. All outdoor trash recycling storage and containers shall be placed on hot mix asphalt, concrete, brick pavers or reinforced concrete and shall be screened from public view by a solid fence of no more than six (6) feet in height.

(k) Fire Hydrants. Fire hydrants shall conform to standards contained in the city's standards and location of fire hydrants shall be approved by the Travis County Fire Marshal.

(l) Prohibitions. Construction shall not be allowed in the street rights-of-way, public utility easements, drainage easements or other easements, or within the setback stance except for

landscaping, sidewalks, landscape irrigation, or fences that are in accordance with the city's fence regulations.

(m) Special Planning Area (Property Located in the Former Austin ETJ).

All subdivisions and projects located in the special planning area, as defined in an interlocal agreement (the "agreement") between the City of Lago Vista and the City of Austin shall also meet the following requirements and should there be a conflict between the following requirements and the standards and specifications in this article, the more restrictive requirement shall apply:

- (1) All single-family development will be set back at least seventy-five (75) feet from the 681-foot contour line above mean sea level, as established by the United States Geological Survey in effect as the date of the agreement between the City of Lago Vista and the City of Austin. All multifamily units and commercial buildings (excluding marinas) will be set back at least one hundred feet (100') from the 681-foot contour line.
- (2) Temporary erosion and sedimentation controls as required by the LCRA under Chapter 13, Article 13.600, Section 13.605(3) of the Lake Travis Nonpoint Source Pollution Control Ordinance in effect as of the date of the agreement will be implemented, designed, constructed and maintained according to the City of Austin Environmental Criteria Manual as determined by comparing calculations under the City of Austin's requirements with those under the proposed controls.
- (3) Impervious cover will be limited to twenty percent (20%) of the total site area over the property for any lot developed with any retail, condominium, apartment or office commercial uses; provided that Lago Vista may approve impervious cover up to twenty-five percent (25%) of the total site area for those lots that are connected to Lago Vista's centralized wastewater system. Total site area includes only those portions of a site that lie above the 681-foot contour line above mean sea level, as established by the United States Geological Survey in effect as of the date hereof.
- (4) For residential lots in the planning area, density shall be subject to the following requirements:
  - (A) A minimum average lot size of one acre shall be maintained on all lots that are served by on-site septic systems.
  - (B) Density of clustered lots served by on-site septic systems may not exceed one (1) single-family unit per acre, provided that a minimum of forty percent (40%) of the total site area is open space.
  - (C) Lago Vista may approve density not to exceed one and one-half (1.5) single-family units per acre for lots that are connected to Lago Vista's centralized wastewater system, provided that a minimum of forty percent (40%) of the total site area is open space.
  - (D) Lago Vista may approve additional density not to exceed two (2) single-family units per acre for lots that are connected to Lago Vista's centralized wastewater system and for which a minimum of forty percent (40%) of the total site area is open space according to the following requirements:

- (i) One (1) additional single-family unit for every two (2) acres of land dedicated by instrument acceptable to Lago Vista for irrigation of wastewater effluent;
- (ii) One (1) additional single-family unit for each acre of land permanently preserved by instrument acceptable to the city as undeveloped open space; or
- (iii) One additional single-family unit for each living unit equivalent (LUE) of wastewater treatment capacity in excess of that required to serve the development that is used to disconnect existing on-site septic systems.

(5) Cut and fill is limited to four feet (4') maximum, provided that cut and fill over four feet (4') shall be permitted if the cut/fill slope is terraced to control erosion and sedimentation.

(6) Detention of the two-year storm for erosion control or, as an alternative, nonerosive conveyance of stormwater to Lake Travis, will be provided as required under City of Austin Land Development Code Chapter 25-7 drainage, and the City of Austin Drainage Criteria Manual.

(7) A building envelope that encompasses the limits of building disturbances will be established and required for residential construction on any lot.

(8) All of the 100-year floodplain located within the planning area shall be dedicated to the City of Lago Vista as a drainage easement in accordance with the City of Lago Vista's subdivision regulations.

(9) Development shall comply with the 2006 LCRA Highland Lakes Ordinance as amended and the City of Austin's regulations regarding the Lake Travis Critical Water Quality Zone (LTWQTZ), and developers and homebuilders shall promote xeriscape landscaping and homeowners education program to reduce potential pollutant sources. The LTWQTZ is defined as the area along and parallel to the shoreline of Lake Travis, coinciding with the 681.0-foot contour line. Development within the LTWQTZ is prohibited, except that a boat dock, pier, wharf, or marina and necessary access and appurtenances are allowed. Prior-approval by Lago Vista or an agency designated by the Lago Vista city council shall be required for a site development plan or building permit that proposes the use of building materials treated with chemicals to be submerged or located within the LTWQTZ.

(10) Lago Vista shall provide an annual status report to the director of the City of Austin Watershed Protection and Development Review Department of the options used by developers to obtain additional density, which report shall include the following:

- (A) Developments that have connected to Lago Vista's wastewater system;
- (B) The number of septic systems that have been disconnected in the release area;
- (C) The number of acres dedicated for irrigation of wastewater effluent; and
- (D) The number of acres permanently preserved for open space.

### **Sec 3.5.106 Procedure**

(a) Procedure. All required site development plans shall be submitted to the city for approval.

(b) Submission. All submission for site plan approval shall conform to the following requirements:

- (1) A site development plan shall be submitted to the city manager or their designee at any time prior to the issuance of a building permit, subject to the provisions of this article, and along with the following:
  - (A) Completed application forms and the payment of all applicable fees;
  - (B) A letter requesting any variances from the provisions of this article;
  - (C) Any attendant documents needed to supplement the information provided on the site development plan.
- (2) City staff shall review all site development plan submittals for completeness within thirty (30) days of the receipt of the application. If, in the judgment of city staff, the site development plan submittal substantially fails to meet the minimal informational requirements as outlined above, the applicant will be notified of any additional information required. Once the application and related submittals meet minimal informational requirements the application shall be declared administratively complete and the technical review process will commence.
- (3) City staff and the city engineer shall complete the technical review process within thirty (30) days. If, in the judgment of the city staff and city engineer, the site development plan fails to meet the technical standards for the city, the applicant will be notified of the deficiencies. Once the site development plan and related submittals are deemed to meet all technical standards, the application will be declared technically complete.
- (4) Once the site development plan is determined to be technically complete, city staff and the city engineer shall review the plan for consistency with city codes, policies and plans. Should the city staff and the city engineer determine that the site development plan is in compliance with city codes, policies and plans and the applicant has made no requests for variances from the city codes, policies and plans, the site development plan shall be approved.
- (5) Should the city staff and/or city engineer determine that the site development represents a deviation from city codes, policies or plans, the site development plan shall not be considered approved and the city staff shall notify the applicant of the need to revise the site development plan or submit a request for variances for each item which deviates from city code, policies or plans.
- (6) Site development plan approval by the city staff and engineer, as authorized herein, shall be evidenced by the authorized signature of the city manager and city engineer on the site development plan. Approval by the city staff and city engineer shall become effective immediately.
- (7) If the applicant requests a variance or variances from city ordinances, policies or plans, the site development plan with the requested variances shall be scheduled in sixty (60) days or less for consideration by the Building and Standards Commission in a public meeting. The fee for the request will be equal to the fee established for appeals or variances for relief from the requirements of Chapter 3. City staff or the city engineer shall prepare a report analyzing the site development plan submittal, and recommending either approval or disapproval of the site development plan and the requested variances. The date and time of the meeting of the

Building and Standards Commission that authorized any variance or variances shall be appropriately documented on the site development plan set that includes the approval signatures referenced above.

- (8) If the developer chooses to submit a written withdrawal to the city manager or their designee at least seventy-two (72) hours in advance of the Building and Standards Commission meeting at which the request for relief appears on an agenda, it will not be considered. The submittal may appear on a future Building and Standards Commission agenda but an additional fee is required.
- (9) It shall be the right of the applicant seeking site development plan approval, to appeal a decision of the city staff, for any reason whatsoever to the Building and Standards Commission and have that Commission render the final decision.
- (10) A site development plan may be rejected at any time subsequent to submittal and prior to final written approval for failure to meet the minimum informational requirements of this article.

(c) Approval.

- (1) Zoning of the tract that shall permit the uses proposed by the site development plan, or any pending zoning amendment necessary to permit the proposed uses shall have been adopted by the city council prior to approval of the site development plan.
- (2) Upon formal denial of a site development plan or a site development plan variance request, no subsequent application for the same or substantially the same site development plan, on the same or substantially the same land proposed to be developed, shall be filed within one (1) year from that date.
- (3) A site development plan approval pursuant to these provisions shall run with the land and shall continue to be valid upon a change of ownership of the site or structure which was the subject of the application.
- (4) The developer shall be responsible for specific approvals from other agencies as required.
- (5) Approval of a site development plan shall authorize a developer to begin constructing site improvements only in accordance with a separately issued nonpoint source pollution permit or other similarly limited site improvement permit. However, no building shall be constructed or protected trees removed until a building permit has been issued.

(d) Expiration. Unless a longer time shall be specifically established as a condition of approval, a site development plan approval shall lapse and become void twelve (12) months following the date on which such approval became effective, unless prior to the expiration, building permit is issued and construction is commenced and diligently pursued toward completion.

(e) Revision. If a revision to the approved site development plan becomes necessary, whether requested by the city staff or the developer, then the site development plan shall be resubmitted and approved by city staff for compliance with this article.

(f) Extension. Site development plan approval subject to lapse may be extended if the developer submits a written request for extension to the city council thirty (30) days prior to the expiration

date. The city council, at its sole discretion, may or may not approve an extension of up to one hundred and eighty (180) days after the original expiration date.

### **Sec 3.5.107 Enforcement Provisions**

Any person violating any provision of this article within the corporate limits of the City of Lago Vista, Texas, shall be guilty of a misdemeanor, and upon conviction shall be fined an amount not exceeding two thousand dollars (\$2,000.00). Each day that such violation continues shall be a separate offense. Prosecution or conviction under this provision shall never be a bar to any other remedy or relief for violations of this article.

## **EXHIBIT A SITE DEVELOPMENT PLAN SUBMISSION REQUIREMENTS**

### **A.10 Variances**

When requesting a variance, a letter addressed to the City Manager or their designee which includes the subdivision name, address of the site, description of the variance and justification, and the applicable ordinance and section, should accompany the application.

### **A.11 Tag Plats**

If a variance is being requested, provide one copy of each of the current tax plats, showing all properties within 300 feet of the tract. Include all maps referenced within the 300 feet. Outline the tract in red (DO NOT SPLICE MAPS TOGETHER). Tax plats are available at the Travis County Tax Appraisal District.

### **A.12 Tax Certificate**

Tax certificates must be submitted with all subdivision and construction plan applications. These may be obtained from the Travis County Tax and should indicate there are no taxes owed.

### **A.13 Engineer's Summary Letter - See Exhibit B-I**

Provide a printed original and digital copy.

### **A.14 Geotechnical Investigation Report - See Exhibit B-II**

Submit a printed original and digital copy. This report may be submitted at a later date but no later than the submittal of construction plans for the second review.

### **A.15 Construction Plans - See Exhibit A-III**

One digital and one full-size printed set of construction plans are required. The construction plans shall consist of the following (see requirements below for each Plan):

- (a) Cover Sheet
- (b) Final Plat
- (c) Erosion and Sedimentation Controls
- (d) Drainage and Utility Layout

- (e) Street Plan and Profile
- (f) Drainage Plan and Profile Sheets
- (g) Detention, Filtration and/or Sedimentation Ponds
- (h) Construction Details

#### **A.16 Pavement Striping Plan**

If pavement striping is proposed, a striping plan is required.

#### **A.17 Drainage Report**

One printed original and a digital copy shall be submitted with the application and shall include the following:

- (a) source of floodplain information (calculations where applicable)
- (b) calculations supporting adequacy of existing and proposed on-site channels, storm sewers, and drainage structures
- (c) calculations supporting adequacy of detention pond size
- (d) calculations for floodplain modifications and cross-sections
- (e) summary assessment of impact on adjacent properties and drainage structures
- (f) signature and seal of professional engineer on report
- (g) calculations of existing and fully developed flows
- (h) calculations of off-site flows
- (i) calculations of capacity of drainage facilities on adjacent properties affecting hydraulic performance in the subdivision or project

### **EXHIBIT B-I ENGINEER'S SUMMARY LETTER**

#### **BI A Acceptance of Plans**

No construction plans will be accepted unless accompanied by a summary letter signed and sealed by the same registered Texas professional engineer who sealed the construction plans. The summary letter should describe the proposed development and might include, but not limited to, the following:

- (a) Acreage to be developed.
- (b) Type of development.
- (c) Explanation of any proposed project phasing.

- (d) Methods to be used for handling storm water runoff, i.e., drainage easements, channels, curb inlets, storm sewers, detention, sedimentation and filtration ponds, water quality control methods, etc.
- (e) Effect the proposed development will have on existing and future drainage systems in the area and on the natural and traditional character of the land and waterways.
- (f) Justification for exemption from the City's ordinances and standards.

### **EXHIBIT B-II GEOTECHNICAL INVESTIGATION REPORT**

#### **BII.1 Number of Copies**

One printed original and a digital copy of the Geotechnical Investigation Report shall be furnished prior to the second review of the plans.

#### **BII.2 Pavement Design**

Pavement design shall be based on City of Austin Procedures for Street Paving Thickness Design (Subdivision Memorandum E-78-3 from DPWT) or the Municipal Pavement Structural Design and Life-Cycle Cost Analysis System (MFPS-1 S-I).

#### **BII.3 Seal and Signature**

Show legible professional engineer's seal and signature.

### **EXHIBIT B-III CONSTRUCTION PLAN CHECKLIST**

#### **BIII.1 Cover Sheet**

Show the following on the cover sheet:

- (a) Subdivision name on cover sheet in a substantial font (use the same name as on the final plat).
- (b) Legal description of property (lots, block, subdivision name).
- (c) Name, address and telephone number of owner and engineering firm preparing plans.
- (d) Project location map that clearly indicates precise location of the tract with a north arrow.
- (e) State Department of Highways and Public Transportation Stationing, for streets intersecting or adjacent to state maintained roadways.
- (f) Tabulation sheet index.
- (g) Legible professional engineer's seal and signature.

#### **BIII.2 Notes**

Show the following:

- (a) One of the following notes:

- (1) This project complies with the Lower Colorado River Authority Non-Point Source Pollution Control Ordinance, as approved by the City of Lago Vista, or
- (2) This project is EXEMPT from the Lower Colorado River Authority Non-Point Source Pollution Control Ordinance, as approved by the City of Lago Vista.
- (b) The following note: All responsibility for the adequacy of these plans remains with the Engineer who prepared them. In approving these plans the City of Lago Vista must rely upon the adequacy of the work of the Design Engineer.
- (c) Applicable City of Lago Vista General Construction Notes for subdivision or project construction.
- (d) Tabulation of applicable Special Notes.
- (e) Construction Sequencing.

### **BIII.3 Approval Blocks**

Show the following approval blocks:

- (a) Signature block for TX DOT, if applicable

\_\_\_\_\_

Texas Department of Transportation

\_\_\_\_\_

Date

- (b) Signature blocks

Approved by:

\_\_\_\_\_

Review Engineer for the City of Lago Vista

\_\_\_\_\_

Date

- (c) Approved by:

\_\_\_\_\_

Travis County Fire Marshal

\_\_\_\_\_

Date

- (d) A revision block:

No.	Revision Description	Approved By	Date
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\_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

### **BIII.4 General Construction Notes**

- (a) All construction shall be in accordance with the City of Austin Standard Specifications, as adopted and approved by the City of Lago Vista.

- (1) Design Procedures are in complete compliance with the City of Austin Drainage Criteria Manual; or
- (2) Design procedures are in general compliance with the City of Austin Drainage Criteria Manual and all variances to the manual are noted.

- (b) A minimum of one benchmark per site development to include description, location, and elevation. Tie to State Plane Coordinate System, when possible.
- (c) Prior to beginning construction, the owner or his authorized representative shall convene a Pre-Construction Conference between the City of Lago Vista, consulting engineer, contractor, and any other affected parties. Notify the Public Works Director at least forty-eight (48) hours prior to the time of the conference and forty-eight (48) hours prior to the beginning of construction.
- (d) The contractor shall give the City a minimum of forty-eight (48) hours written notice to the Public Works Director before beginning each phase of construction.
- (e) Barricades, built to City of Lago Vista Standard Specifications, shall be constructed on all dead-end streets and as necessary during construction to maintain job safety. (Streets, etc. may be listed in addition to or instead of note).
- (f) No blasting is permitted.
- (g) Any existing pavement, curbs, and/or sidewalks damaged or removed will be repaired by the contractor at his expense before acceptance of the site development.
- (h) The location of any water and/or wastewater lines shown on the plans must be verified by the City of Lago Vista Utility Crews.
- (i) Locate existing utilities a minimum of forty-eight (48) hours BEFORE you dig. In addition to contacting 811 by telephone, please contact the Public Works Director for local water and wastewater utility information. Other public utility providers include the following:
  - (1) AT&T;
  - (2) Spectrum Communications; and
  - (3) Pedernales Electric Cooperative (PEC).
- (j) All storm sewer pipes to be Class III RCP unless noted otherwise.

### **BIII.5 Special Notes**

Notes for Plans where applicable:

The sub-grade material in (name of subdivision or project) was tested by (name of professional soil lab) in (day, month, and year) and the street section designed according to current City of Austin Design Criteria. The street sections are to be constructed as follows (Give street names, width of R.O.W., or other methods to identify proposed design of different pavement thickness. In writing or graphically, describe the street section(s) to be constructed):

- (a) Manhole frames, covers, and water valve covers will be raised to finished pavement grade at the owner's expense by a qualified contractor with City Inspection. All utility adjustments shall be completed prior to final paving construction.
- (b) At intersections which have valley drainage, the crowns of the intersecting streets will culminate in a distance of forty feet (40') from the intersecting curb line unless otherwise noted. Inlets on the intersecting street shall not be constructed within forty feet (40') of the valley gutter.
- (c) Sidewalk requirements (give street name and location of required sidewalk, i.e., north, south, east, or west side).
- (d) A curb lay down is required at all points where the proposed sidewalk intersects the curb.
- (e) When using lime stabilization of sub grade, it shall be placed in slurry form.
- (f) Inside the city limits, sidewalks shall be completed prior to acceptance of any Type I or Type II driveway approaches and/or issuance of a Certificate of Occupancy. Sidewalks adjacent to "common areas," parkways, or other locations on which no building construction will take place, must be constructed prior to final acceptance of the subdivision or project.
- (g) A storm water management facility maintenance agreement will be executed and recorded prior to final acceptance of this subdivision or project.
- (h) A license agreement for landscaping maintenance and irrigation in street R.O.W. shall be executed by the developer in party with the City prior to final acceptance of the subdivision or project.

### **BIII.6 Construction Sequencing**

- (a) Call and provide written notification to the City of Lago Vista Public Works Director at least forty-eight (48) hours prior to beginning any work.
- (b) Install temporary erosion controls and tree protection fencing prior to any clearing and grubbing or rough grading for streets. No stockpiling of fill material will be permitted at this time.
- (c) Install all utilities to be located under the proposed pavement.
- (d) Begin installation of storm sewer lines. Upon completion, restore as much disturbed area as possible, particularly channels and large open areas.
- (e) Re-grade streets in accordance with the sub-grade design parameters.
- (f) Insure that all construction site improvements and underground utility crossings are completed. Place the first course of base material on all streets and parking areas.
- (g) Install curbs and gutters.
- (h) Lay final base course on all streets.
- (i) Lay asphalt or pour concrete.
- (j) Complete all underground installations within the R.O.W.

- (k) Complete final grading and restoration of detention, sedimentation/filtration ponds.
- (l) Complete permanent erosion control and restoration of site vegetation.
- (m) Remove and dispose of temporary erosion controls.

### **BIII.7 Drainage Layout**

Show the following:

- (a) Drainage layout of subdivision or project depicted to scale with a north arrow aimed toward the top or to the right of sheet and show limits of construction as a distinguishable line.
- (b) Existing adjoining street layout or other property adjacent to project (show adjacent subdivision names).
- (c) Street names, lot and block numbers and R.O.W. lines.
- (d) Location of all existing drainage structures on or adjacent to project.
- (e) Existing contours at two-foot minimum intervals.
- (f) Individual drainage areas and upstream drainage areas based on improvements and final grading (distinguish these areas by heavy dashed lines).
- (g) Size in acres, C, I, tc, and Q for 25- and 100-year storm for each specific drainage area.
- (h) Arrows indicating flow direction for streets and lots.
- (i) Summation of Q's at pertinent points (street intersections, inlets, passing inlets, headwalls, control outlet structures, etc.).
- (j) All low and high points.
- (k) All street and lot fill areas (usually done by shading).
- (l) Proposed drainage facilities (identify route of drainage from site to nearest waterway).
- (m) All existing and proposed drainage easements as per final plat or by separate instrument.
- (n) Q's leaving proposed streets onto surrounding property and Q's entering proposed streets from surrounding property.
- (o) Existing and proposed 100-year floodplains for all waterways.
- (p) Minimum building slab elevations for lots on which the 100-year floodplain encroaches (only if elevations are not shown on approved/released final plat included with plans).
- (q) The name of the engineering firm who prepared plans, the subdivision title and the name or initials of the design engineer and checking engineer.

- (r) Provide the following for each drainage area (see following pages for standard form of calculations tables):
  - (1) Runoff Calculations: Flow distribution and percent (%) that flows on street, over land and in gutter; tc (time of concentration-in minutes); A (drainage area); I 25; C25; Q25; I100; C100; Q100
  - (2) For inlet design: Clogging factor required inlet type (i.e. 10' TYPE I or I-R) as per detail; Y (depth of flow in gutter); a (gutter depression @ inlet throat); Q Cap (inlet capacity); inlet area - A; inlet tc; composite "C" value used; Q @ inlet.
  - (3) For storm sewer design: tc's, areas, composite "C" value (if a uniform time of concentration for the system is not used); clearly show limits of construction.
- (s) Legible professional engineer's seal, signature, and date of signing.
- (t) All variances to City of Austin Drainage Criteria Manual and other policies.
- (u) The following note on all sheets: All responsibility for the adequacy of these plans remains with the Engineer who prepared them. In approving these plans, the City of Lago Vista must rely upon the adequacy of the work of the Design Engineer.

### **BIII.8 Street Plan**

Show the following:

- (a) The street name and sheet number in the right corners.
- (b) North arrow to the top or right of sheets.
- (c) Stationing south to north or west to east with street layout directly over the profile stationing.
- (d) Depictions at an appropriate scale for legible full-size prints and to include paving dimensions (face to face of curb).
- (e) Lot numbers, block numbers and frontage dimensions (dimensions required only if approved/released final plat is not included with the review plans).
- (f) Street names within respective R.O.W.
- (g) Existing or proposed easements and intersecting R.O.W.
- (h) Sidewalks and assignments as per City of Lago Vista and final plat requirements.
- (i) Centerline "TIC" marks, every 50 feet.
- (j) Drainage facilities within or intersecting R.O.W. and indicate stationing on both sides of inlets (show inlet type and label storm sewer lines, i.e. LINE "A", M.H., etc.)
- (k) Existing drainage facilities as dashed lines.
- (l) Drainage flow arrows, high and low points.

- (m) Match lines on street plan sheets for continuation of streets on other streets.
- (n) As a minimum, a 50-foot extension of proposed streets and show proposed tie-in to existing streets.
- (o) Sheet numbers for intersecting streets, and show full intersection, provide dimensions, and give street names.
- (p) Stations equation along CL (centerline) intersections of streets.
- (q) Barricades if required.
- (r) Plan view must transpose directly above profile stationing when possible (otherwise, center the midpoint of the curve on the sheet) (limits shown on the plan view must be the same as the limits shown on the profile).
- (s) Labeled asphalt valley gutter or concrete valley gutter (required if % grade <1.2%) at intersections where appropriate.
- (t) Clearly show the beginning and ending of project.
- (u) Limits of gutter depression by shading and showing stationing or dimensioning.
- (v) Clearly show all PC, PT, CC, or PRC stations.
- (w) All fill areas.
- (x) Horizontal curves conforming to the most recent City of Lago Vista Street Standards.
- (y) Legible professional engineer's seal, signature, and date of signing.

### **BIII.9 Street Profile**

Show the following:

- (a) Legend and scale.
- (b) Even stations on heavy vertical division lines.
- (c) Even elevation heavy vertical division lines.
- (d) Even elevation in right and left margins.
- (e) Street profile for minimum of fifty feet (50') beyond end of project (include property lines and proposed future grade and/or existing street grade).
- (f) Existing left and right R.O.W. profiles.
- (g) Proposed top curb (TC) profiles a minimum of two line widths to stand out from other profile lines.
- (h) Proposed TC elevations (clearly identify right and left).

- (i) Identify and give elevations at all PC, PT, PRC, PCC, PVC, PVI, or DVT stations (show by circle or heavy dot).
- (j) Vertical curves with the following information: curve length, PVI stations and elevation, tangent intercept, tangents and tangent grades (show elevations every 25 feet maximum along vertical curves).
- (k) Curb returns PC, MID PT, PT, with tangent and grade past point of return.
- (l) Elevations every 50 feet (i.e. +00 and +50) along the street profile.
- (m) Maximum curb split of 2% (30' street = 0.60', 44' street = 0.88') if applicable.
- (n) Vertical curves conforming to latest City of Lago Vista Street Standards, or AASHTO Green Book Criteria.
- (o) Submit letter of understanding for street lighting in sag curves and confirmation of availability of fixed source lighting when applicable.

### **BIII.10 Drainage Plan**

(Plan view must transpose directly above profile stationing). Show the following:

- (a) Street layout and name, lot layout and numbers (where storm drainage occurs).
- (b) Drainage easements.
- (c) Storm drainage facilities. Label and give sizes [i.e.: line "A-18" RCP, channel "B"-r' FB(Flat bottom), 2-10' x G MBC, etc.]
- (d) All horizontal PI PC, PT, BEGIN and END stations and pipe and/or channel intersection equations.
- (e) All inlets, Q at inlets, Q passing inlets, and flow lines.
- (f) PI deflection angle in degrees.
- (g) North arrow to top or right of sheet and show scale (scale: 1"=50").
- (h) Any storm sewer assignments off R.O.W. or centerline.
- (i) Channel and/or pipe riprap and type of headwalls (show erosion control measures (dissipater blocks, rock riprap, etc.)
- (j) Beginning, end stations, for erosion control material used for channels (label type of material to be used, i.e. dry stacked or mortared rock, etc.)
- (k) Bottom width, side slopes, concrete trickle or pilot channel, height of channel lining if used, maximum and minimum depth of channel, Manning's "n" valve used, and station to station section of typical channels/scale section.
- (l) Note 100-year overflow swales over pipe system (when used) and give typical detail.

- (m) Open channels with a minimum flat bottom width of six feet.
- (n) Legible professional engineer's seal and signature.
- (o) All variances to City of Austin drainage Criteria Manual and other policies.
- (p) The following note on all sheets: All responsibility for the adequacy of these plans remains with the Engineer who prepared them. In approving these plans, the City of Lago Vista must rely upon the adequacy of the work of the Design Engineer.

### **BIII.11 Drainage Profile**

Show the following:

- (a) Scales: horizontal (same as Plan, Vertical, 1/10th of horizontal scale).
- (b) Stationing proceeding from low end to high end from left to right for channels or storm sewer lines.
- (c) Existing ground profile at proposed channel locations.
- (d) Top of bank left and right, and fill areas for channels.
- (e) All stations and elevations at points of intersecting drainage lines, grade breaks, riprap, drop sections, toe of splash pads, toe of slope, beginning of slope, and beginning of riprap.
- (f) Q25, V25, HGL25, depth (d25), Q100, V100, HGL100, depth (d100), and Head losses (H), for each segment of channel.
- (g) Clearly show the beginning and end of construction and show stations or channels.
- (h) Flow line elevation every 50 feet maximum (i.e. +00, +50).
- (i) Elevations at inlets on storm sewer lines.
- (j) Grade of flow line (in %), and pipe sizes (label all pipes as RCP for storm sewer lines).
- (k) Q25, V25, HGL25, depth (d25), Q100, V100, HGL100, depth (d100), and Head losses (H), and df (when pipe is flowing full) for storm sewer lines.
- (l) Stations and elevations at PI, PC, PT, grade breaks, intersecting lines and beginning and end of construction for storm sewer lines.
- (m) All riprap, headwalls, etc. at pipe ends.
- (n) Full channel section at pipe ends when appropriate.
- (o) Existing and finished ground line and fill areas at pipe centerline for storm sewer lines.

### **BIII.12 Detention Pond**

Show the following:

- (a) Include drainage area map for detention ponds in plans.
- (b) Typical cross-section of ponds.
- (c) Summary table of supportive calculations for hydrology, hydraulics, hydrographies, control outlet structures, etc.
- (d) Legible professional engineer's seal and signature.

### **BIII.13 Construction Detail**

Use City of Lago Vista Typical Standards, or the equivalent, for any structures such as street inlet and sidewalks. Show the following:

- (a) Manhole or junction box detail.
- (b) Pipe end riprap or headwall details.
- (c) Channel lining.
- (d) Culvert box and headwall details to meet Texas Department of Transportation requirements for concrete strength and structural reinforcing.
- (e) Traffic/pedestrian guard railing details (when applicable).
- (f) Other details as needed for construction.
- (g) Legible professional engineer's seal and signature.
- (h) The following note on all sheets: All responsibility for the adequacy of these plans remains with the Engineer who prepared them. In approving these plans, the City of Lago Vista must rely upon the adequacy of the work of the Design Engineer.

**EXHIBIT “B”**

**CHAPTER 3**

**BUILDING REGULATIONS**

**ARTICLE 3.1400 DRAINAGE AND EROSION CONTROL REGULATIONS**

**Sec.3.1401 Drainage**

(a) Intent. In addition to the provisions contained in the Chapter 10 Subdivision Regulations and the Chapter 3.5 Site Development Regulations, these requirements represent the application of accepted principles of drainage and is a working supplement to basic information from standard drainage handbooks and other publications on drainage. The policy statements of this section provide the underlying principles by which all drainage facilities shall be designed. The application of the policy is facilitated by the technical criteria contained in the remainder of the City's adopted drainage design manual.

\*\*\*\*\*

(c) General.

(1) The City shall have the right to enter the premises of any site discharging stormwater to the stormwater drainage system, to water quality control systems, or natural drainage ways to determine if the discharger is complying with all requirements of this article and with any state, federal or LCRA discharge permit, limitation or requirement. Dischargers shall allow the City ready access to the entire premises for the purposes of inspection, sampling, records examination, records copying, and for the performance of any additional duties. Dischargers shall make available to the City, upon request, any Storm Water Pollution Prevention Plans (SWPPPs), operating permits, site development permits, construction permits, modifications thereto, self-inspection reports, monitoring records, compliance evaluations, notices of intent, and any other records, reports, and other documents related to compliance with this article and with any state, federal or LCRA discharge permit.

(2) The City shall withhold all City services and improvements of any nature, including but not limited to the maintenance of streets or additional permit approvals until proposed construction or development is complete and in accordance with the approved engineering plans and City standards. If intended or required for public use, such public improvements shall be dedicated to and accepted by the City in accordance with the provisions of the Chapter 10 Subdivision Regulations and Chapter 3.5 Site Development Regulations.

\*\*\*\*\*

**ARTICLE 3.500 RECREATIONAL VEHICLE PARK REGULATIONS**

**Sec 3.501 Title and Purpose**

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(d) Relationship to Other Ordinances. Depending on the plans of the developer, one or more of the following ordinances will apply to the development of a recreational vehicle park:

- (1) Zoning Ordinance. A developer with property inside the city limits, proposing to construct or operate a recreational vehicle park, should refer to the zoning ordinance and the zoning map to determine the proper zoning for the property. See Chapter 14.
- (2) Subdivision Ordinance. If the developer with property inside the city limits or within the city's extraterritorial jurisdiction proposes to subdivide his property for the purpose of constructing a recreational vehicle park, the subdivision ordinance shall apply. See Chapter 10.
- (3) Site Development Ordinance. A recreational vehicle park shall comply with the site development ordinance. See Chapter 3.5.

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**EXHIBIT “C”**

**CHAPTER 10**

**SUBDIVISION REGULATION**

**EXHIBIT A PLAT AND SUBDIVISION REGULATIONS**

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**Section 6 Miscellaneous**

**6.10 Conflict**

If any provision of this Chapter is in conflict with any other provision in this Chapter or any other provision in the code of ordinances, the most strict or restrictive provision shall apply. If a provision in this Chapter is not more restrictive but is different from any provision in this chapter or the code of ordinances, the administrator shall determine what provision should be followed. Additional and related local ordinance requirements include, but are not limited to, the provisions within Chapter 3, Chapter 3.5, Chapter 11, Chapter 13, Chapter 14, and the Technical Construction Standard Specifications (TCSS) adopted as Ordinance Number 19-02-21-02 as amended. The TCSS is incorporated by reference herein and shall be deemed to have the same force and effect as if set forth in full herein.

**EXHIBIT “D”**

**CHAPTER 11**

**RIGHT-OF-WAY ACCESS AND MANAGEMENT**

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**Sec 7 General Specifications for All Roadways**

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(f) Geometric design of driveway access.

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(10) Turn lanes. Turn lanes are exclusive deceleration and storage lanes that allow for vehicles to turn left and right at intersections outside the through lane. Turn lanes requirements are provided in the subdivision and site development regulations (See Chapter 10 and 3.5).

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**EXHIBIT “A”**

**CHAPTER 3.5**

**SITE DEVELOPMENT**

**Sec 3.5.101 Definitions**

The following words, terms and phrases, when used in this article, shall have the meanings ascribed to them in this section, except where the context clearly indicates a different meaning. Words used in the present tense include the future tense. Words used in the plural number include the singular, and words in the singular include the plural. The word “shall” is always mandatory. The word “herein” means in this article. The word “regulations” means the provisions of any applicable ordinance, rule, regulation or policy. The word “person” means any human being or legal entity and includes a corporation, a partnership, and an incorporated or unincorporated association. The words “used or occupied” as applied to any land or building shall be construed to include the words intended, arranged, or designed to be used or occupied.

**Berm.** A landscaped strip of ground used as a visual screen, constructed so that it is no more than six (6) feet above grade with a minimum of three (3) feet of horizontal distance for each one (1) foot of height.

**Bluff.** An abrupt vertical change in topography of more than twenty (20) feet with an average slope steeper than three (3) feet of rise for one (1) foot of horizontal travel.

**Centerline of Waterway.** The centerline of the waterway refers to existing topographically-defined channels. If not readily discernible, the centerline shall be determined by the accepted drainage calculations.

**City.** The City of Lago Vista, Texas.

**City Council.** The city council of the City of Lago Vista, Texas.

**Crest of Bluff.** A line on the ground parallel to and at the top of a bluff, beyond which the average slope is no steeper than one (1) foot of rise in two (2) feet of travel, for a horizontal distance of not less than forty (40) feet.

**Developer.** A person who improves land, primarily through the construction of subdivision or project infrastructure and structures.

**Development.** Buildings, utilities, roads and other structures; construction; and excavation, dredging, grading, filling and clearing or removing vegetation for the purpose of constructing permanent structures on the property.

**Development Plan.** A scaled drawing representing an area of land to be improved/developed and indicating the legal boundary of said property and the nature and extent of all existing and proposed improvements to said project.

Easement. An interest in land granted to the city, to the public generally, and/or to utilities, for drainage ways or for installing or maintaining utilities across, over and under private land, together with the right to enter thereon with machinery and vehicles necessary for the maintenance of said easements or utilities.

Engineer. A person duly authorized under the provisions of the Texas Engineering Registration Act, as heretofore or hereafter amended, to practice the profession of engineering.

Extraterritorial Jurisdiction. That territory outside the corporate limits of the City of Lago Vista which is within the jurisdiction of the city by virtue of the Municipal Annexation Act, Vernon's Annotated Civil Statutes, Article 970a.

Impervious Cover. Roads, parking areas, buildings, and other impermeable construction covering the natural land surface including but not limited to: all streets, driveways, buildings and structures within a development.

Landscaped Area. An area which has been enhanced by the use of plant material, planters, paving blocks, landscaping rock or water but not including poured concrete or asphalt.

Lot. Any legally platted lot, tract or parcel of land situated wholly or partially within the corporate limits of the City of Lago Vista, Texas.

Multifamily. Any development having more than two residential units on a single lot.

Plant Material. Grass, trees, shrubs, flowers, vines, groundcover or any other living matter.

Setback Distance. The minimum horizontal distance between the prop line and the front wall of any projection of a building, excluding uncovered steps, uncovered balconies, uncovered porches, and roof overhangs.

Shoreline. The edge of the water during normal level or flow conditions. In the case of Lake Travis, it is the six hundred eighty-one (681) foot MSL contour. In the case on intermittent streams, it is the centerline of the waterway.

Site. Any legally platted lot situated wholly or partially within the corporate limits of the City of Lago Vista, Texas.

Street. The entire width between the boundary lines of every way publicly or privately maintained when any part thereof is open to the use of the public for purposes of vehicular travel.

Structure. Anything constructed or erected which requires location on or in the ground or attached to anything having a location on or in the ground that is of a permanent nature and such is a constructed or an erected object that is positioned on private property or in street right-of-way of the city.

Wastewater Disposal System. Any publicly or privately owned system for the collection, treatment, and disposal of sewage that is operated in accordance with the terms and conditions of a valid waste discharge permit issued by the Texas Natural Resource Conservation Commission or appropriate regulatory agency.

Water Supply System. The water facility infrastructure for the collection, treatment, storage and distribution of potable water from the source of supply to one or more consumers. The water system shall be designed in accordance with and approved by the Texas Natural Resource Conservation Commission and the City of Lago Vista.

### **Sec 3.5.102 Site Development Plan Required**

A site development plan as provided for here and meeting the requirements of this article is required prior to the development or construction of any improvements on any lot that is zoned other than single-family residential or two-family residential, or that is intended for any use for any purpose or occupancy other than for single-family or two-family residential occupancy. A site development plan meeting the requirements of this article is not required in situation in which a single-family residential or two-family residential structure is to be constructed on any lot or other parcel of land that is zoned other than single-family residential or two-family residential.

### **Sec 3.5.103 Purpose and Applicability**

- (a) **Purpose.** The site development plan provides detailed graphic information and associated text indicating property boundaries, easements, land use, streets, utilities, drainage, off-street parking, lighting, signage, landscaping, vehicle and pedestrian circulation, open spaces, and general conformance with the master plan and ordinances of the city.
- (b) **Applicability.** This article shall apply to every person owning and/or proposing to develop a legally platted lot for any development other than single-family or a residential duplex within the City of Lago Vista. Multifamily or commercial lots located within planned development districts shall not be exempt from the requirements of this article.
- (c) **Other Requirements.** Additional and related local ordinance requirements include, but are not limited to, the provisions within Chapter 3, Chapter 10, Chapter 11, Chapter 13, Chapter 14, and the Technical Construction Standard Specifications (TCSS) adopted as Ordinance Number 19-02-21-02 as amended. The TCSS is incorporated by reference herein and shall be deemed to have the same force and effect as if set forth in full herein.

### **Sec 3.5.104 Format And Content**

- (a) **Format.** The site development plan shall be submitted digitally in a format that can be conveniently printed at a scale sufficient to meet the informational requirements herein.
- (b) **Content.** The site plan shall include all of the land proposed to be developed or improved, and any off-site improvements required to accommodate the project. The site development plan shall contain, or have attached thereto:
  - (1) A cover sheet showing:
    - (A) Names, addresses and phone numbers of the record owner or developer, and authorized agents including the architect, engineer, landscape architect, and surveyor (those applicable);
    - (B) The proposed name of the project;
    - (C) A location map showing the relation of the project to streets and other prominent features in all directions for a radius of at least one (1) mile using a scale that legibly depicts those same prominent features;
    - (D) The owner's name, address (including city, state and zip code), deed or plat reference and property lines of property within two hundred (200) feet of the lot boundaries as determined by the most recent tax rolls;

- (E) Certifications and signature blocks as required by the city;
- (F) The total acreage of the property to be developed;
- (G) The zoning district as defined by the current city zoning ordinance.

(2) An existing conditions plan, showing:

- (A) Boundary of existing zoning districts, if applicable;
- (B) The existing property lines, including bearings and distances, of the land being developed or improved. Property lines shall be drawn sufficiently wide to provide easy identification;
- (C) The location of existing structures and improvements, if applicable;
- (D) All trees except Ashe junipers ten (10) inches and diameter and greater when measured forty (40) inches above the adjacent grade within the limits of the proposed on-site and/or off-site improvements;
- (E) Centerline of water courses, creeks, existing drainage structures and other pertinent data shall be shown;
- (F) Lines delineating the regulatory 100- year floodplain, if applicable;
- (G) Topographic data indicating one (1) foot contour intervals. The contoured area shall extend outward from the property boundary for a distance equal to twenty-five percent (25%) of the distance across the tract, but not fewer than fifty (50) feet nor more than two hundred (200) feet;
- (H) The locations, sizes and descriptions of all existing utilities, including but not limited to: sewer lines, lift stations, sewer and storm sewer manholes, water lines, water storage tanks, and wells within the property, and/or adjacent thereto. Existing overhead and underground electric utilities shall also be shown;
- (I) The location, dimensions, names and descriptions of all existing or recorded streets, alleys, reservations, easements, building setbacks or other public rights-of-way within the property, intersecting or contiguous with its boundaries or forming such boundaries, as determined from existing deed and plat records. The existing rights-of-way width, street pavement width, bar ditches, driveways on adjacent property and driveways located across the street of any boundary street to the property shall also be shown;
- (J) Location of city limit lines and/or outer border of the city's extraterritorial jurisdiction, as depicted on the city's most recent official map, if either traverse the lot or is contiguous to the lot boundary.

(3) An Erosion and Sedimentation Control Plan, showing:

- (A) Proposed fill or other structure elevating techniques, levees, channel modifications and detention facilities;

- (B) Existing and proposed topographic conditions with vertical intervals not greater than one (1) foot referenced to a United States Geological Survey or Coastal and Geodetic Survey benchmark or monument;
- (C) The location, size, and character of all temporary and permanent erosion and sediment controls with specifications detailing all on-site erosion control measures which will be established and maintained during all periods of development and construction;
- (D) Contractor staging areas, vehicle access areas, temporary and permanent spoils storage areas;
- (E) A plan for restoration for the mitigation of erosion in all areas disturbed during construction;
- (F) All temporary and permanent erosion and sedimentation controls within the city shall be designed in accordance with the LCRA Lake Travis Nonpoint Source Pollution Control Ordinance Technical Manual, as amended.

(4) A site plan, showing all visible improvements to the land, including:

- (A) The location, dimensions, square footage, height, and intended use of existing and proposed buildings on the site;
- (B) Location, number and dimensions of existing and proposed parking spaces, distinguishing between standard, handicap and van handicap spaces, and calculation of applicable minimum requirements;
- (C) The location, type and dimensions of proposed driveways, signs and traffic control devices.

(5) A grading and drainage plan, showing:

- (A) A drainage area map delineating areas to be served by proposed drainage improvements;
- (B) Detailed design of all drainage facilities, including typical channel or paving section, storm sewers, detention ponds and other stormwater control facilities;
- (C) Accurate cross-sections, plan and profiles of every drainage improvement proposed in a public utility easement and/or public right-of-way;
- (D) Existing and proposed topographic conditions with vertical intervals not greater than one (1) foot referenced to a United States Geological Survey or Coastal and Geodetic Survey benchmark or monument;
- (E) Attendant documents containing design computations in accordance with the city subdivision ordinance and this article, and any additional information required to evaluate the proposed drainage improvements;
- (F) The City of Austin Drainage Criteria Manual, as amended (hereinafter the “Manual”) is hereby adopted, save and except the following:

- (i) Preface;
- (ii) Paragraphs 1.2.4.E.2 and 1.2.4.E.11;
- (iii) Paragraphs 1.2.7;
- (iv) Paragraphs 1.4.0;
- (v) Paragraphs 1.5.0.3, 1.5.0.1, 1.5.0.5 and 1.5.0.6;
- (vi) Paragraphs 8.2;
- (vii) Appendix D; and
- (viii) All references to the City of Austin, including its departments, boards or divisions shall be the same departments, boards or divisions with the City of Lago Vista. Where such departments, boards or divisions do not exist within the City of Lago Vista, such references shall be construed to mean the city engineer of Lago Vista or other representative authorized by the city council of the city to perform such functions for the city.

(G) All drainage systems and improvements shall conform to the provisions and requirements of the manual and good engineering practices and shall show conveyance to off-site drainageways, (for example, continuation of street bar ditch or natural drainageway);

(H) The site grading plan shall show and include the existing ground elevations and finish construction grades, including existing ground elevations for a minimum of one hundred feet (100') onto adjoining property, width of existing street right-of-way and existing pavement width;

(6) A utility plan showing:

- (A) The layout, size and specific location of proposed water mains and other related structures and in accordance with all current city standards, specifications and criteria for construction of water mains;
- (B) The location of proposed fire hydrants, valves, meters and other pipe fittings;
- (C) Design details showing the connection with the existing city water system;
- (D) The layout, size and specific location of the proposed wastewater lines, lift stations, and other related structures, and in accordance with all current city standards, specifications and criteria for construction of wastewater systems;
- (E) Plan and profile drawings for each line in public rights-of-way or public utility easements, showing existing ground level elevation at centerline of pipe, pipe size and flow line elevation at all bends, drops, turns, station numbers at fifty-foot intervals;
- (F) Detailed design for lift stations, special wastewater appurtenances, if applicable;

- (G) Utility demand data, and other attendant documents, to evaluate the adequacy of proposed utility improvements, and the demand on existing city utilities.
- (7) A landscape plan showing:
  - (A) Compliance with all ordinances requiring landscaping;
  - (B) The layout size and specific location of proposed sprinkler systems as designed by a licensed landscape irrigator;
  - (C) The following maintenance note: The developer and subsequent owners of the landscaped property, or the manager or agent of the owner, shall be responsible for the maintenance of all landscape areas. Said areas shall be maintained so as to present a healthy, neat and orderly appearance at all times and shall be kept free of refuse and debris. All planted areas shall be provided with a readily available water supply and watered as necessary to ensure continuous healthy growth and development. Maintenance shall include the replacement of all dead plant material if that material was used to meet the requirements of applicable regulations.
- (8) Construction details, showing (when applicable):
  - (A) Structural retaining walls and/or detention outlet structures;
  - (B) Storm sewer manhole and covers, typical channel sections, inlets, safety end treatments and headwalls;
  - (C) Wastewater manholes and covers, cleanouts, grease traps, pipe bedding and backfill;
  - (D) Water valves, water meters, fire hydrants, thrust blocks, backflow prevention and concrete encasement;
  - (E) Driveways, curb and gutter, sidewalks, curb ramps, pavement sections and pavement repair;
  - (F) Silt fence, rock berms, stabilized construction entrance, inlet protection;
  - (G) Traffic controls when working in the public rights-of-way that comply with the Uniform Standards for Traffic Control Devices; and
  - (H) Illumination structures.
- (9) Each sheet shall have a legend identifying symbols, lines or other graphic representations.

**Sec 3.5.105 Standards and Specifications**

- (a) Cuts and Fills Less Than Four (4) Feet. Cuts and fills of less than four (4) feet may be subject to the approval of the city manager or his/ her designee. No fill material of less than four (4) feet in depth shall be placed or be in such an amount so as to restrict the city from being able to access utility lines within an easement. Any cut more than three (3) feet in depth shall install a fence or screening device in accordance with the zoning ordinance.

(b) Cuts and Fills of Four (4) Feet or More. No fill on any building site shall exceed a maximum of eight (8) feet of depth, except for landscaping purposes. No cut of any building site shall be greater than eight (8) feet, except for structural excavation. Cuts and fills of four (4) feet or more shall require a soils report, prepared by a geotechnical engineer, with recommended embankment slopes and/or slope stabilization such as retaining walls. The geotechnical report shall also address that the adjacent property will not be impacted negatively by a cut or fill. The civil engineer shall address the drainage to and from the site and any permanent erosion controls required for the slope stability. Any cut more than three (3) feet in depth shall install a fence or screening device in accordance with the zoning ordinance. No fill material of less than four (4) feet in depth shall be placed or be in such an amount so as to restrict the city from being able to access utility lines within an easement.

(c) Streets, Driveways, Roadways, Parking Areas, Alleys and Sidewalks. Streets, roadways, alleys, and sidewalks shall conform to standards contained in the city's standards of construction of streets and drainage in the subdivision regulations and all other adopted regulations and standards. Also reference Chapter 11.

(1) Vehicular Access.

(A) Vehicular access to property from the public right-of-way shall be controlled in such a manner as to protect the traffic-carrying capacity and safety of the street upon which the property abuts and access is taken, ensuring that the public use and purpose of public rights-of-way is unimpaired as well as protect the value of the public infrastructure and adjacent property.

(B) A traffic impact analysis conducted by a qualified transportation engineer to determine the impact of a development on roads or streets shall be required for any use or combination of uses that will generate two hundred (200) or more vehicle trips per day.

(C) On arterial and collector streets, or if necessary for the safe and efficient movement of traffic, all accesses shall be designed and constructed with physical improvements and appropriate traffic control measures to assist or restrict turning movements, including, without limitation, acceleration or deceleration lanes, access islands, street medians, and signage, as may be required of the development if the city manager or their designee finds that they are necessary to preserve the safety or the current level of service of the existing street. The city manager or their designee shall determine the length and degree of the required access restriction measures for the property.

(2) If a traffic impact analysis is required, the site development plan must ensure that:

(A) Proposed access and egress points have reasonable sight distances;

(B) No inordinately adverse impact will result on the nearest intersections;

(C) No unsafe traffic circulation or pedestrian problems will result;

(D) Surrounding land uses and driveways are not inordinately adversely affected;

(E) Rights-of-way width, pavement width, and street design are adequate for the number of vehicle trips projected per day, so as not to overburden the street system.

(3) Driveways and Parking Areas.

- (A) The slope of a driveway shall not exceed twelve percent (12%) measured between the street end of the apron and the opposite end of the driveway.
- (B) Driveways shall not be located within two hundred (200) feet from the intersection of a collector street and an arterial street, or two (2) collector streets that are identified in the city's master plan.
- (C) Driveways and parking areas shall have an adequate base of compacted granular material and a wearing surface of hot mix asphalt, concrete, brickpavers, or reinforced concrete.
- (D) Driveway and pavement designs shall be determined by a qualified soils testing and pavement design registered professional engineer. Total flexible thickness design shall be based on soil type, traffic loading and a twenty (20) year minimum design life.
- (E) The number of parking spaces required shall conform to standards contained in the latest version of the zoning ordinance.
- (F) The number of off-street loading spaces shall conform to the latest version of the zoning ordinance.
- (G) Parking areas for bicycle racks shall be at the discretion of the developer.
- (H) Parking areas which necessitate backing out onto arterial streets or collector streets shall be prohibited.
- (I) On-street parking shall not be allowed.

(d) Water and Wastewater Systems. Water and wastewater systems shall conform to the latest versions of applicable ordinances.

(e) Landscaping. Landscaping shall conform to the following requirements:

- (1) All plant materials used for landscaping shall be of healthy stock, preferably native or naturalized, with low water requirements.
- (2) All areas which are not impervious cover shall be landscaped and a landscaping shall extend to the property lines.
- (3) Grass or groundcover may be installed in the rights-of-way contiguous to the site with the permission of the city or other relevant governmental authority. The owner of the site contiguous to the right-of-way shall be responsible for maintaining the grass or groundcover in the right-of-way.
- (4) Trees.
  - (A) All trees required to be planted to meet the minimum tree requirement shall be at least two (2) inches in diameter and located at least three (3) feet from any impervious cover.

(B) The site shall meet the type and number of trees to be planted, replaced or retained on the lot according to the latest version of the zoning ordinance.

(5) All traffic islands or peninsulas shall be landscaped. Grass or grand [ground] cover shall not exceed eighteen (18) inches in height.

(6) Except for landscaping in the rights-of-way, landscaped areas which are located adjacent to pavement shall be protected from vehicles with concrete curbs or concrete tire stops.

(7) Existing oak trees shall be preserved to the extent reasonable and feasible. A list of the trees to be planted, replaced, retained or removed shall be submitted with the site plan and must be approved by the city manager or their designee.

(8) Fifty percent (50%) of the landscaped areas must include living material. All disturbed areas must be re-seeded with grass, groundcover or similar living matter.

(9) All retaining walls, including but not limited to detention and/or filtration ponds, of three (3) feet or more shall require shrubbery and/or vines of healthy stock and of a minimum of two (2) feet in height immediately after planting in front of the retaining wall. All shrubbery and/or vines shall be planted and maintained so as to form a continuous, unbroken, solid, visual screen which will grow to the same height or more of the retaining wall.

(f) Drainage and Erosion Control. Drainage improvements and erosion control measures shall comply with applicable provisions of Articles 3.1100 and 3.1400 of Chapter 3 and Section 4.112 of Chapter 10 of the Code of Ordinances.

(g) Fences and Screening Devices. Fences and screening devices shall be installed, repaired and maintained according to the latest version of the zoning ordinance.

(h) Illumination. All outdoor or exterior lighting shall comply with Article 3.800 of Chapter 3.

(i) Pollution. Unless authorized by an appropriate governmental agency with powers superseding those of the city, there shall be no dumping or discharge of any waste, wastewater, chemicals, polluted liquids, toxic material, or any other substance which constitutes a known hazard to humans or animals, onto any property or into any waterway or stream, pond, or detention pond, during the development process or after its completion. During the development process, all developments shall have on-site, rigid, tamper-proof containers for the disposal of nonhazardous solid waste.

(j) Trash Storage and Recycling Areas. Trash storage and recycling areas for attached dwellings and all business and industrial buildings or uses shall be accommodated within the structure, or adequate area shall be included on site and indicated on a site plan. All outdoor trash recycling storage and containers shall be placed on hot mix asphalt, concrete, brick pavers or reinforced concrete and shall be screened from public view by a solid fence of no more than six (6) feet in height.

(k) Fire Hydrants. Fire hydrants shall conform to standards contained in the city's standards and location of fire hydrants shall be approved by the Travis County Fire Marshal.

(l) Prohibitions. Construction shall not be allowed in the street rights-of-way, public utility easements, drainage easements or other easements, or within the setback stance except for

landscaping, sidewalks, landscape irrigation, or fences that are in accordance with the city's fence regulations.

(m) Special Planning Area (Property Located in the Former Austin ETJ).

All subdivisions and projects located in the special planning area, as defined in an interlocal agreement (the "agreement") between the City of Lago Vista and the City of Austin shall also meet the following requirements and should there be a conflict between the following requirements and the standards and specifications in this article, the more restrictive requirement shall apply:

- (1) All single-family development will be set back at least seventy-five (75) feet from the 681-foot contour line above mean sea level, as established by the United States Geological Survey in effect as the date of the agreement between the City of Lago Vista and the City of Austin. All multifamily units and commercial buildings (excluding marinas) will be set back at least one hundred feet (100') from the 681-foot contour line.
- (2) Temporary erosion and sedimentation controls as required by the LCRA under Chapter 13, Article 13.600, Section 13.605(3) of the Lake Travis Nonpoint Source Pollution Control Ordinance in effect as of the date of the agreement will be implemented, designed, constructed and maintained according to the City of Austin Environmental Criteria Manual as determined by comparing calculations under the City of Austin's requirements with those under the proposed controls.
- (3) Impervious cover will be limited to twenty percent (20%) of the total site area over the property for any lot developed with any retail, condominium, apartment or office commercial uses; provided that Lago Vista may approve impervious cover up to twenty-five percent (25%) of the total site area for those lots that are connected to Lago Vista's centralized wastewater system. Total site area includes only those portions of a site that lie above the 681-foot contour line above mean sea level, as established by the United States Geological Survey in effect as of the date hereof.
- (4) For residential lots in the planning area, density shall be subject to the following requirements:
  - (A) A minimum average lot size of one acre shall be maintained on all lots that are served by on-site septic systems.
  - (B) Density of clustered lots served by on-site septic systems may not exceed one (1) single-family unit per acre, provided that a minimum of forty percent (40%) of the total site area is open space.
  - (C) Lago Vista may approve density not to exceed one and one-half (1.5) single-family units per acre for lots that are connected to Lago Vista's centralized wastewater system, provided that a minimum of forty percent (40%) of the total site area is open space.
  - (D) Lago Vista may approve additional density not to exceed two (2) single-family units per acre for lots that are connected to Lago Vista's centralized wastewater system and for which a minimum of forty percent (40%) of the total site area is open space according to the following requirements:

- (i) One (1) additional single-family unit for every two (2) acres of land dedicated by instrument acceptable to Lago Vista for irrigation of wastewater effluent;
- (ii) One (1) additional single-family unit for each acre of land permanently preserved by instrument acceptable to the city as undeveloped open space; or
- (iii) One additional single-family unit for each living unit equivalent (LUE) of wastewater treatment capacity in excess of that required to serve the development that is used to disconnect existing on-site septic systems.

(5) Cut and fill is limited to four feet (4') maximum, provided that cut and fill over four feet (4') shall be permitted if the cut/fill slope is terraced to control erosion and sedimentation.

(6) Detention of the two-year storm for erosion control or, as an alternative, nonerosive conveyance of stormwater to Lake Travis, will be provided as required under City of Austin Land Development Code Chapter 25-7 drainage, and the City of Austin Drainage Criteria Manual.

(7) A building envelope that encompasses the limits of building disturbances will be established and required for residential construction on any lot.

(8) All of the 100-year floodplain located within the planning area shall be dedicated to the City of Lago Vista as a drainage easement in accordance with the City of Lago Vista's subdivision regulations.

(9) Development shall comply with the 2006 LCRA Highland Lakes Ordinance as amended and the City of Austin's regulations regarding the Lake Travis Critical Water Quality Zone (LTWQTZ), and developers and homebuilders shall promote xeriscape landscaping and homeowners education program to reduce potential pollutant sources. The LTWQTZ is defined as the area along and parallel to the shoreline of Lake Travis, coinciding with the 681.0-foot contour line. Development within the LTWQTZ is prohibited, except that a boat dock, pier, wharf, or marina and necessary access and appurtenances are allowed. Prior-approval by Lago Vista or an agency designated by the Lago Vista city council shall be required for a site development plan or building permit that proposes the use of building materials treated with chemicals to be submerged or located within the LTWQTZ.

(10) Lago Vista shall provide an annual status report to the director of the City of Austin Watershed Protection and Development Review Department of the options used by developers to obtain additional density, which report shall include the following:

- (A) Developments that have connected to Lago Vista's wastewater system;
- (B) The number of septic systems that have been disconnected in the release area;
- (C) The number of acres dedicated for irrigation of wastewater effluent; and
- (D) The number of acres permanently preserved for open space.

#### **Sec 3.5.106 Procedure**

(a) Procedure. All required site development plans shall be submitted to the city for approval.

(b) Submission. All submission for site plan approval shall conform to the following requirements:

- (1) A site development plan shall be submitted to the city manager or their designee at any time prior to the issuance of a building permit, subject to the provisions of this article, and along with the following:
  - (A) Completed application forms and the payment of all applicable fees;
  - (B) A letter requesting any variances from the provisions of this article;
  - (C) Any attendant documents needed to supplement the information provided on the site development plan.
- (2) City staff shall review all site development plan submittals for completeness within thirty (30) days of the receipt of the application. If, in the judgment of city staff, the site development plan submittal substantially fails to meet the minimal informational requirements as outlined above, the applicant will be notified of any additional information required. Once the application and related submittals meet minimal informational requirements the application shall be declared administratively complete and the technical review process will commence.
- (3) City staff and the city engineer shall complete the technical review process within thirty (30) days. If, in the judgment of the city staff and city engineer, the site development plan fails to meet the technical standards for the city, the applicant will be notified of the deficiencies. Once the site development plan and related submittals are deemed to meet all technical standards, the application will be declared technically complete.
- (4) Once the site development plan is determined to be technically complete, city staff and the city engineer shall review the plan for consistency with city codes, policies and plans. Should the city staff and the city engineer determine that the site development plan is in compliance with city codes, policies and plans and the applicant has made no requests for variances from the city codes, policies and plans, the site development plan shall be approved.
- (5) Should the city staff and/or city engineer determine that the site development represents a deviation from city codes, policies or plans, the site development plan shall not be considered approved and the city staff shall notify the applicant of the need to revise the site development plan or submit a request for variances for each item which deviates from city code, policies or plans.
- (6) Site development plan approval by the city staff and engineer, as authorized herein, shall be evidenced by the authorized signature of the city manager and city engineer on the site development plan. Approval by the city staff and city engineer shall become effective immediately.
- (7) If the applicant requests a variance or variances from city ordinances, policies or plans, the site development plan with the requested variances shall be scheduled in sixty (60) days or less for consideration by the Building and Standards Commission in a public meeting. The fee for the request will be equal to the fee established for appeals or variances for relief from the requirements of Chapter 3. City staff or the city engineer shall prepare a report analyzing the site development plan submittal, and recommending either approval or disapproval of the site development plan and the requested variances. The date and time of the meeting of the

Building and Standards Commission that authorized any variance or variances shall be appropriately documented on the site development plan set that includes the approval signatures referenced above.

- (8) If the developer chooses to submit a written withdrawal to the city manager or their designee at least seventy-two (72) hours in advance of the Building and Standards Commission meeting at which the request for relief appears on an agenda, it will not be considered. The submittal may appear on a future Building and Standards Commission agenda but an additional fee is required.
- (9) It shall be the right of the applicant seeking site development plan approval, to appeal a decision of the city staff, for any reason whatsoever to the Building and Standards Commission and have that Commission render the final decision.
- (10) A site development plan may be rejected at any time subsequent to submittal and prior to final written approval for failure to meet the minimum informational requirements of this article.

(c) Approval.

- (1) Zoning of the tract that shall permit the uses proposed by the site development plan, or any pending zoning amendment necessary to permit the proposed uses shall have been adopted by the city council prior to approval of the site development plan.
- (2) Upon formal denial of a site development plan or a site development plan variance request, no subsequent application for the same or substantially the same site development plan, on the same or substantially the same land proposed to be developed, shall be filed within one (1) year from that date.
- (3) A site development plan approval pursuant to these provisions shall run with the land and shall continue to be valid upon a change of ownership of the site or structure which was the subject of the application.
- (4) The developer shall be responsible for specific approvals from other agencies as required.
- (5) Approval of a site development plan shall authorize a developer to begin constructing site improvements only in accordance with a separately issued nonpoint source pollution permit or other similarly limited site improvement permit. (However, no building shall be constructed or protected trees removed until a building permit has been issued.)

(d) Expiration. Unless a longer time shall be specifically established as a condition of approval, a site development plan approval shall lapse and become void twelve (12) months following the date on which such approval became effective, unless prior to the expiration, building permit is issued and construction is commenced and diligently pursued toward completion.

(e) Revision. If a revision to the approved site development plan becomes necessary, whether requested by the city staff or the developer, then the site development plan shall be resubmitted and approved by city staff for compliance with this article.

(f) Extension. Site development plan approval subject to lapse may be extended if the developer submits a written request for extension to the city council thirty (30) days prior to the expiration

date. The city council, at its sole discretion, may or may not approve an extension of up to one hundred and eighty (180) days after the original expiration date.

#### **Sec 3.5.107 Enforcement Provisions**

Any person violating any provision of this article within the corporate limits of the City of Lago Vista, Texas, shall be guilty of a misdemeanor, and upon conviction shall be fined an amount not exceeding two thousand dollars (\$2,000.00). Each day that such violation continues shall be a separate offense. Prosecution or conviction under this provision shall never be a bar to any other remedy or relief for violations of this article.

### **EXHIBIT A SITE DEVELOPMENT PLAN SUBMISSION REQUIREMENTS**

#### **A.10 Variances**

When requesting a variance, a letter addressed to the City Manager or their designee which includes the subdivision name, address of the site, description of the variance and justification, and the applicable ordinance and section, should accompany the application.

#### **A.11 Tag Plats**

If a variance is being requested, provide one copy of each of the current tax plats, showing all properties within 300 feet of the tract. Include all maps referenced within the 300 feet. Outline the tract in red (DO NOT SPLICE MAPS TOGETHER). Tax plats are available at the Travis County Tax Appraisal District.

#### **A.12 Tax Certificate**

Tax certificates must be submitted with all subdivision and construction plan applications. These may be obtained from the Travis County Tax and should indicate there are no taxes owed.

#### **A.13 Engineer's Summary Letter - See Exhibit B-I**

Provide a printed original and digital copy.

#### **A.14 Geotechnical Investigation Report - See Exhibit B-II**

Submit a printed original and digital copy. This report may be submitted at a later date but no later than the submittal of construction plans for the second review.

#### **A.15 Construction Plans - See Exhibit A-III**

One digital and one full-size printed set of construction plans are required. The construction plans shall consist of the following (see requirements below for each Plan):

- (a) Cover Sheet
- (b) Final Plat
- (c) Erosion and Sedimentation Controls
- (d) Drainage and Utility Layout

- (e) Street Plan and Profile
- (f) Drainage Plan and Profile Sheets
- (g) Detention, Filtration and/or Sedimentation Ponds
- (h) Construction Details

#### **A.16 Pavement Striping Plan**

If pavement striping is proposed, a striping plan is required.

#### **A.17 Drainage Report**

One printed original and a digital copy shall be submitted with the application and shall include the following:

- (a) source of floodplain information (calculations where applicable)
- (b) calculations supporting adequacy of existing and proposed on-site channels, storm sewers, and drainage structures
- (c) calculations supporting adequacy of detention pond size
- (d) calculations for floodplain modifications and cross-sections
- (e) summary assessment of impact on adjacent properties and drainage structures
- (f) signature and seal of professional engineer on report
- (g) calculations of existing and fully developed flows
- (h) calculations of off-site flows
- (i) calculations of capacity of drainage facilities on adjacent properties affecting hydraulic performance in the subdivision or project

### **EXHIBIT B-I ENGINEER'S SUMMARY LETTER**

#### **BI A Acceptance of Plans**

No construction plans will be accepted unless accompanied by a summary letter signed and sealed by the same registered Texas professional engineer who sealed the construction plans. The summary letter should describe the proposed development and might include, but not limited to, the following:

- (a) Acreage to be developed.
- (b) Type of development.
- (c) Explanation of any proposed project phasing.

- (d) Methods to be used for handling storm water runoff, i.e., drainage easements, channels, curb inlets, storm sewers, detention, sedimentation and filtration ponds, water quality control methods, etc.
- (e) Effect the proposed development will have on existing and future drainage systems in the area and on the natural and traditional character of the land and waterways.
- (f) Justification for exemption from the City's ordinances and standards.

### **EXHIBIT B-II GEOTECHNICAL INVESTIGATION REPORT**

#### **BII.1 Number of Copies**

One printed original and a digital copy of the Geotechnical Investigation Report shall be furnished prior to the second review of the plans.

#### **BII.2 Pavement Design**

Pavement design shall be based on City of Austin Procedures for Street Paving Thickness Design (Subdivision Memorandum E-78-3 from DPWT) or the Municipal Pavement Structural Design and Life-Cycle Cost Analysis System (MFPS-1 S-I).

#### **BII.3 Seal and Signature**

Show legible professional engineer's seal and signature.

### **EXHIBIT B-III CONSTRUCTION PLAN CHECKLIST**

#### **BIII.1 Cover Sheet**

Show the following on the cover sheet:

- (a) Subdivision name on cover sheet in a substantial font (use the same name as on the final plat).
- (b) Legal description of property (lots, block, subdivision name).
- (c) Name, address and telephone number of owner and engineering firm preparing plans.
- (d) Project location map that clearly indicates precise location of the tract with a north arrow.
- (e) State Department of Highways and Public Transportation Stationing, for streets intersecting or adjacent to state maintained roadways.
- (f) Tabulation sheet index.
- (g) Legible professional engineer's seal and signature.

#### **BIII.2 Notes**

Show the following:

- (a) One of the following notes:

- (1) This project complies with the Lower Colorado River Authority Non-Point Source Pollution Control Ordinance, as approved by the City of Lago Vista, or
- (2) This project is EXEMPT from the Lower Colorado River Authority Non-Point Source Pollution Control Ordinance, as approved by the City of Lago Vista.

- (b) The following note: All responsibility for the adequacy of these plans remains with the Engineer who prepared them. In approving these plans the City of Lago Vista must rely upon the adequacy of the work of the Design Engineer.
- (c) Applicable City of Lago Vista General Construction Notes for subdivision or project construction.
- (d) Tabulation of applicable Special Notes.
- (e) Construction Sequencing.

### **BIII.3 Approval Blocks**

Show the following approval blocks:

- (a) Signature block for TX DOT, if applicable

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Texas Department of Transportation

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Date

- (b) Signature blocks

Approved by:

---

Review Engineer for the City of Lago Vista

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Date

- (c) Approved by:

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Travis County Fire Marshal

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Date

- (d) A revision block:

No.	Revision Description	Approved By	Date
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### **BIII.4 General Construction Notes**

- (a) All construction shall be in accordance with the City of Austin Standard Specifications, as adopted and approved by the City of Lago Vista.

- (1) Design Procedures are in complete compliance with the City of Austin Drainage Criteria Manual; or
- (2) Design procedures are in general compliance with the City of Austin Drainage Criteria Manual and all variances to the manual are noted.

(b) A minimum of one benchmark per site development to include description, location, and elevation. Tie to State Plane Coordinate System, when possible.

(c) Prior to beginning construction, the owner or his authorized representative shall convene a Pre-Construction Conference between the City of Lago Vista, consulting engineer, contractor, and any other affected parties. Notify the Public Works Director at least forty-eight (48) hours prior to the time of the conference and forty-eight (48) hours prior to the beginning of construction.

(d) The contractor shall give the City a minimum of forty-eight (48) hours written notice to the Public Works Director before beginning each phase of construction.

(e) Barricades, built to City of Lago Vista Standard Specifications, shall be constructed on all dead-end streets and as necessary during construction to maintain job safety. (Streets, etc. may be listed in addition to or instead of note).

(f) No blasting is permitted.

(g) Any existing pavement, curbs, and/or sidewalks damaged or removed will be repaired by the contractor at his expense before acceptance of the site development.

(h) The location of any water and/or wastewater lines shown on the plans must be verified by the City of Lago Vista Utility Crews.

(i) Locate existing utilities a minimum of forty-eight (48) hours BEFORE you dig. In addition to contacting 811 by telephone, please contact the Public Works Director for local water and wastewater utility information. Other public utility providers include the following:

- (1) AT&T;
- (2) Spectrum Communications; and
- (3) Pedernales Electric Cooperative (PEC).

(j) All storm sewer pipes to be Class III RCP unless noted otherwise.

### **BIII.5 Special Notes**

Notes for Plans where applicable:

The sub-grade material in (name of subdivision or project) was tested by (name of professional soil lab) in (day, month, and year) and the street section designed according to current City of Austin Design Criteria. The street sections are to be constructed as follows (Give street names, width of R.O.W., or other methods to identify proposed design of different pavement thickness. In writing or graphically, describe the street section(s) to be constructed):

- (a) Manhole frames, covers, and water valve covers will be raised to finished pavement grade at the owner's expense by a qualified contractor with City Inspection. All utility adjustments shall be completed prior to final paving construction.
- (b) At intersections which have valley drainage, the crowns of the intersecting streets will culminate in a distance of forty feet (40') from the intersecting curb line unless otherwise noted. Inlets on the intersecting street shall not be constructed within forty feet (40') of the valley gutter.
- (c) Sidewalk requirements (give street name and location of required sidewalk, i.e., north, south, east, or west side).
- (d) A curb lay down is required at all points where the proposed sidewalk intersects the curb.
- (e) When using lime stabilization of sub grade, it shall be placed in slurry form.
- (f) Inside the city limits, sidewalks shall be completed prior to acceptance of any Type I or Type II driveway approaches and/or issuance of a Certificate of Occupancy. Sidewalks adjacent to "common areas," parkways, or other locations on which no building construction will take place, must be constructed prior to final acceptance of the subdivision or project.
- (g) A storm water management facility maintenance agreement will be executed and recorded prior to final acceptance of this subdivision or project.
- (h) A license agreement for landscaping maintenance and irrigation in street R.O.W. shall be executed by the developer in party with the City prior to final acceptance of the subdivision or project.

### **BIII.6 Construction Sequencing**

- (a) Call and provide written notification to the City of Lago Vista Public Works Director at least forty-eight (48) hours prior to beginning any work.
- (b) Install temporary erosion controls and tree protection fencing prior to any clearing and grubbing or rough grading for streets. No stockpiling of fill material will be permitted at this time.
- (c) Install all utilities to be located under the proposed pavement.
- (d) Begin installation of storm sewer lines. Upon completion, restore as much disturbed area as possible, particularly channels and large open areas.
- (e) Re-grade streets in accordance with the sub-grade design parameters.
- (f) Insure that all construction site improvements and underground utility crossings are completed. Place the first course of base material on all streets and parking areas.
- (g) Install curbs and gutters.
- (h) Lay final base course on all streets.
- (i) Lay asphalt or pour concrete.
- (j) Complete all underground installations within the R.O.W.

- (k) Complete final grading and restoration of detention, sedimentation/filtration ponds.
- (l) Complete permanent erosion control and restoration of site vegetation.
- (m) Remove and dispose of temporary erosion controls.

### **BIII.7 Drainage Layout**

Show the following:

- (a) Drainage layout of subdivision or project depicted to scale with a north arrow aimed toward the top or to the right of sheet and show limits of construction as a distinguishable line.
- (b) Existing adjoining street layout or other property adjacent to project (show adjacent subdivision names).
- (c) Street names, lot and block numbers and R.O.W. lines.
- (d) Location of all existing drainage structures on or adjacent to project.
- (e) Existing contours at two-foot minimum intervals.
- (f) Individual drainage areas and upstream drainage areas based on improvements and final grading (distinguish these areas by heavy dashed lines).
- (g) Size in acres, C, I, tc, and Q for 25- and 100-year storm for each specific drainage area.
- (h) Arrows indicating flow direction for streets and lots.
- (i) Summation of Q's at pertinent points (street intersections, inlets, passing inlets, headwalls, control outlet structures, etc.).
- (j) All low and high points.
- (k) All street and lot fill areas (usually done by shading).
- (l) Proposed drainage facilities (identify route of drainage from site to nearest waterway).
- (m) All existing and proposed drainage easements as per final plat or by separate instrument.
- (n) Q's leaving proposed streets onto surrounding property and Q's entering proposed streets from surrounding property.
- (o) Existing and proposed 100-year floodplains for all waterways.
- (p) Minimum building slab elevations for lots on which the 100-year floodplain encroaches (only if elevations are not shown on approved/released final plat included with plans).
- (q) The name of the engineering firm who prepared plans, the subdivision title and the name or initials of the design engineer and checking engineer.

- (r) Provide the following for each drainage area (see following pages for standard form of calculations tables):
  - (1) Runoff Calculations: Flow distribution and percent (%) that flows on street, over land and in gutter; tc (time of concentration-in minutes); A (drainage area); I 25; C25; Q25; I100; C100; Q100
  - (2) For inlet design: Clogging factor required inlet type (i.e. 10' TYPE I or I-R) as per detail; Y (depth of flow in gutter); a (gutter depression @ inlet throat); Q Cap (inlet capacity); inlet area - A; inlet tc; composite "C" value used; Q @ inlet.
  - (3) For storm sewer design: tc's, areas, composite "C" value (if a uniform time of concentration for the system is not used); clearly show limits of construction.
- (s) Legible professional engineer's seal, signature, and date of signing.
- (t) All variances to City of Austin Drainage Criteria Manual and other policies.
- (u) The following note on all sheets: All responsibility for the adequacy of these plans remains with the Engineer who prepared them. In approving these plans, the City of Lago Vista must rely upon the adequacy of the work of the Design Engineer.

### **BIII.8 Street Plan**

Show the following:

- (a) The street name and sheet number in the right corners.
- (b) North arrow to the top or right of sheets.
- (c) Stationing south to north or west to east with street layout directly over the profile stationing.
- (d) Depictions at an appropriate scale for legible full-size prints and to include paving dimensions (face to face of curb).
- (e) Lot numbers, block numbers and frontage dimensions (dimensions required only if approved/released final plat is not included with the review plans).
- (f) Street names within respective R.O.W.
- (g) Existing or proposed easements and intersecting R.O.W.
- (h) Sidewalks and assignments as per City of Lago Vista and final plat requirements.
- (i) Centerline "TIC" marks, every 50 feet.
- (j) Drainage facilities within or intersecting R.O.W. and indicate stationing on both sides of inlets (show inlet type and label storm sewer lines, i.e. LINE "A", M.H., etc.)
- (k) Existing drainage facilities as dashed lines.
- (l) Drainage flow arrows, high and low points.

- (m) Match lines on street plan sheets for continuation of streets on other streets.
- (n) As a minimum, a 50-foot extension of proposed streets and show proposed tie-in to existing streets.
- (o) Sheet numbers for intersecting streets, and show full intersection, provide dimensions, and give street names.
- (p) Stations equation along CL (centerline) intersections of streets.
- (q) Barricades if required.
- (r) Plan view must transpose directly above profile stationing when possible (otherwise, center the midpoint of the curve on the sheet) (limits shown on the plan view must be the same as the limits shown on the profile).
- (s) Labeled asphalt valley gutter or concrete valley gutter (required if % grade <1.2%) at intersections where appropriate.
- (t) Clearly show the beginning and ending of project.
- (u) Limits of gutter depression by shading and showing stationing or dimensioning.
- (v) Clearly show all PC, PT, CC, or PRC stations.
- (w) All fill areas.
- (x) Horizontal curves conforming to the most recent City of Lago Vista Street Standards.
- (y) Legible professional engineer's seal, signature, and date of signing.

### **BIII.9 Street Profile**

Show the following:

- (a) Legend and scale.
- (b) Even stations on heavy vertical division lines.
- (c) Even elevation heavy vertical division lines.
- (d) Even elevation in right and left margins.
- (e) Street profile for minimum of fifty feet (50') beyond end of project (include property lines and proposed future grade and/or existing street grade).
- (f) Existing left and right R.O.W. profiles.
- (g) Proposed top curb (TC) profiles a minimum of two line widths to stand out from other profile lines.
- (h) Proposed TC elevations (clearly identify right and left).

- (i) Identify and give elevations at all PC, PT, PRC, PCC, PVC, PVI, or DVT stations (show by circle or heavy dot).
- (j) Vertical curves with the following information: curve length, PVI stations and elevation, tangent intercept, tangents and tangent grades (show elevations every 25 feet maximum along vertical curves).
- (k) Curb returns PC, MID PT, PT, with tangent and grade past point of return.
- (l) Elevations every 50 feet (i.e. +00 and +50) along the street profile.
- (m) Maximum curb split of 2% (30' street = 0.60', 44' street = 0.88') if applicable.
- (n) Vertical curves conforming to latest City of Lago Vista Street Standards, or AASHTO Green Book Criteria.
- (o) Submit letter of understanding for street lighting in sag curves and confirmation of availability of fixed source lighting when applicable.

#### **BIII.10 Drainage Plan**

(Plan view must transpose directly above profile stationing). Show the following:

- (a) Street layout and name, lot layout and numbers (where storm drainage occurs).
- (b) Drainage easements.
- (c) Storm drainage facilities. Label and give sizes [i.e.: line "A-18" RCP, channel "B"-r' FB(Flat bottom), 2-10' x G MBC, etc.]
- (d) All horizontal PI PC, PT, BEGIN and END stations and pipe and/or channel intersection equations.
- (e) All inlets, Q at inlets, Q passing inlets, and flow lines.
- (f) PI deflection angle in degrees.
- (g) North arrow to top or right of sheet and show scale (scale: 1"=50").
- (h) Any storm sewer assignments off R.O.W. or centerline.
- (i) Channel and/or pipe riprap and type of headwalls (show erosion control measures (dissipater blocks, rock riprap, etc.)
- (j) Beginning, end stations, for erosion control material used for channels (label type of material to be used, i.e. dry stacked or mortared rock, etc.)
- (k) Bottom width, side slopes, concrete trickle or pilot channel, height of channel lining if used, maximum and minimum depth of channel, Manning's "n" valve used, and station to station section of typical channels/scale section.
- (l) Note 100-year overflow swales over pipe system (when used) and give typical detail.

- (m) Open channels with a minimum flat bottom width of six feet.
- (n) Legible professional engineer's seal and signature.
- (o) All variances to City of Austin drainage Criteria Manual and other policies.
- (p) The following note on all sheets: All responsibility for the adequacy of these plans remains with the Engineer who prepared them. In approving these plans, the City of Lago Vista must rely upon the adequacy of the work of the Design Engineer.

### **BIII.11 Drainage Profile**

Show the following:

- (a) Scales: horizontal (same as Plan, Vertical, 1/10th of horizontal scale).
- (b) Stationing proceeding from low end to high end from left to right for channels or storm sewer lines.
- (c) Existing ground profile at proposed channel locations.
- (d) Top of bank left and right, and fill areas for channels.
- (e) All stations and elevations at points of intersecting drainage lines, grade breaks, riprap, drop sections, toe of splash pads, toe of slope, beginning of slope, and beginning of riprap.
- (f) Q25, V25, HGL25, depth (d25), Q100, V100, HGL100, depth (d100), and Head losses (H), for each segment of channel.
- (g) Clearly show the beginning and end of construction and show stations or channels.
- (h) Flow line elevation every 50 feet maximum (i.e. +00, +50).
- (i) Elevations at inlets on storm sewer lines.
- (j) Grade of flow line (in %), and pipe sizes (label all pipes as RCP for storm sewer lines).
- (k) Q25, V25, HGL25, depth (d25), Q100, V100, HGL100, depth (d100), and Head losses (H), and df (when pipe is flowing full) for storm sewer lines.
- (l) Stations and elevations at PI, PC, PT, grade breaks, intersecting lines and beginning and end of construction for storm sewer lines.
- (m) All riprap, headwalls, etc. at pipe ends.
- (n) Full channel section at pipe ends when appropriate.
- (o) Existing and finished ground line and fill areas at pipe centerline for storm sewer lines.

### **BIII.12 Detention Pond**

Show the following:

- (a) Include drainage area map for detention ponds in plans.
- (b) Typical cross-section of ponds.
- (c) Summary table of supportive calculations for hydrology, hydraulics, hydrographies, control outlet structures, etc.
- (d) Legible professional engineer's seal and signature.

### **BIII.13 Construction Detail**

Use City of Lago Vista Typical Standards, or the equivalent, for any structures such as street inlet and sidewalks. Show the following:

- (a) Manhole or junction box detail.
- (b) Pipe end riprap or headwall details.
- (c) Channel lining.
- (d) Culvert box and headwall details to meet Texas Department of Transportation requirements for concrete strength and structural reinforcing.
- (e) Traffic/pedestrian guard railing details (when applicable).
- (f) Other details as needed for construction.
- (g) Legible professional engineer's seal and signature.
- (h) The following note on all sheets: All responsibility for the adequacy of these plans remains with the Engineer who prepared them. In approving these plans, the City of Lago Vista must rely upon the adequacy of the work of the Design Engineer.

**EXHIBIT “B”**

**CHAPTER 3**

**BUILDING REGULATIONS**

**ARTICLE 3.1400 DRAINAGE AND EROSION CONTROL REGULATIONS**

**Sec.3.1401 Drainage**

(a) Intent. In addition to the provisions contained in the Chapter 10 Subdivision Regulations and the Chapter ~~10.5~~ 3.5 Site Development Regulations, these requirements represent the application of accepted principles of drainage and is a working supplement to basic information from standard drainage handbooks and other publications on drainage. The policy statements of this section provide the underlying principles by which all drainage facilities shall be designed. The application of the policy is facilitated by the technical criteria contained in the remainder of the City's adopted drainage design manual.

\*\*\*\*\*

(c) General.

(1) The City shall have the right to enter the premises of any site discharging stormwater to the stormwater drainage system, to water quality control systems, or natural drainage ways to determine if the discharger is complying with all requirements of this article and with any state, federal or LCRA discharge permit, limitation or requirement. Dischargers shall allow the City ready access to the entire premises for the purposes of inspection, sampling, records examination, records copying, and for the performance of any additional duties. Dischargers shall make available to the City, upon request, any Storm Water Pollution Prevention Plans (SWPPPs), operating permits, site development permits, construction permits, modifications thereto, self-inspection reports, monitoring records, compliance evaluations, notices of intent, and any other records, reports, and other documents related to compliance with this article and with any state, federal or LCRA discharge permit.

(2) The City shall withhold all City services and improvements of any nature, including but not limited to the maintenance of streets or additional permit approvals until proposed construction or development is complete and in accordance with the approved engineering plans and City standards. If intended or required for public use, such public improvements shall be dedicated to and accepted by the City in accordance with the provisions of the Chapter 10 Subdivision Regulations and Chapter ~~10.5~~ 3.5 Site Development Regulations.

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**ARTICLE 3.500 RECREATIONAL VEHICLE PARK REGULATIONS**

**Sec 3.501 Title ~~And~~ and Purpose**

\*\*\*\*\*

(d) Relationship to Other Ordinances. Depending on the plans of the developer, one or more of the following ordinances will apply to the development of a recreational vehicle park:

- (1) Zoning Ordinance. A developer with property inside the city limits, proposing to construct or operate a recreational vehicle park, should refer to the zoning ordinance and the zoning map to determine the proper zoning for the property. See Chapter 14.
- (2) Subdivision Ordinance. If the developer with property inside the city limits or within the city's extraterritorial jurisdiction proposes to subdivide his property for the purpose of constructing a recreational vehicle park, the subdivision ordinance shall apply. See Chapter 10.
- (3) Site Development Ordinance. A recreational vehicle park shall comply with the site development ordinance. See Chapter ~~10.5~~ 3.5.

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**EXHIBIT “C”**

**CHAPTER 10**

**SUBDIVISION REGULATION**

**EXHIBIT A PLAT AND SUBDIVISION REGULATIONS**

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**Section 6 Miscellaneous**

**6.10 Conflict**

If any provision of this Chapter is in conflict with any other provision in this Chapter or any other provision in the code of ordinances, the most strict or restrictive provision shall apply. If a provision in this Chapter is not more restrictive but is different from any provision in this chapter or the code of ordinances, the administrator shall determine what provision should be followed. Additional and related local ordinance requirements include, but are not limited to, the provisions within Chapter 3, Chapter ~~10.5~~ 3.5, Chapter 11, Chapter 13, Chapter 14, and the Technical Construction Standard Specifications (TCSS) adopted as Ordinance Number 19-02-21-02 as amended. The TCSS is incorporated by reference herein and shall be deemed to have the same force and effect as if set forth in full herein.

**EXHIBIT “D”**

**CHAPTER 11**

**RIGHT-OF-WAY ACCESS AND MANAGEMENT**

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**Sec 7 General Specifications ~~For~~ for All Roadways**

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(f) Geometric design of driveway access.

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(10) Turn lanes. Turn lanes are exclusive deceleration and storage lanes that allow for vehicles to turn left and right at intersections outside the through lane. Turn lanes requirements are provided in the subdivision and site development regulations (See Chapter 10 and ~~10.5~~ 3.5).

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## CHAPTER 10.5

### SITE DEVELOPMENT

#### See 10.5.101 Definitions

~~The following words, terms and phrases, when used in this article, shall have the meanings ascribed to them in this section, except where the context clearly indicates a different meaning. Words used in the present tense include the future tense. Words used in the plural number include the singular, and words in the singular include the plural. The word "shall" is always mandatory. The word "herein" means in this article. The word "regulations" means the provisions of any applicable ordinance, rule, regulation or policy. The word "person" means any human being or legal entity and includes a corporation, a partnership, and an incorporated or unincorporated association. The words "used or occupied" as applied to any land or building shall be construed to include the words intended, arranged, or designed to be used or occupied.~~

Berm. ~~A landscaped strip of ground used as a visual screen, constructed so that it is no more than six (6) feet above grade with a minimum of three (3) feet of horizontal distance for each one (1) foot of height.~~

Bluff. ~~An abrupt vertical change in topography of more than twenty (20) feet with an average slope steeper than three (3) feet of rise for one (1) foot of horizontal travel.~~

Centerline of Waterway. ~~The centerline of the waterway refers to existing topographically defined channels. If not readily discernible, the centerline shall be determined by the accepted drainage calculations.~~

City. ~~The City of Lago Vista, Texas.~~

City Council. ~~The city council of the City of Lago Vista, Texas.~~

Crest of Bluff. ~~A line on the ground parallel to and at the top of a bluff, beyond which the average slope is no steeper than one (1) foot of rise in two (2) feet of travel, for a horizontal distance of not less than forty (40) feet.~~

Developer. ~~A person who improves land, primarily through the construction of subdivision infrastructure and structures.~~

Development. ~~Buildings, utilities, roads and other structures; construction; and excavation, dredging, grading, filling and clearing or removing vegetation for the purpose of constructing permanent structures on the property.~~

Development Plan. ~~A scaled drawing representing an area of land to be improved/developed and indicating the legal boundary of said property and the nature and extent of all existing and proposed improvements to said project.~~

Easement. ~~An interest in land granted to the city, to the public generally, and/or to utilities, for drainage ways or for installing or maintaining utilities across, over and under private land, together with the right~~

~~to enter thereon with machinery and vehicles necessary for the maintenance of said easements or utilities.~~

~~Engineer~~: A person duly authorized under the provisions of the Texas Engineering Registration Act, as heretofore or hereafter amended, to practice the profession of engineering.

~~Extraterritorial Jurisdiction~~: That territory outside the corporate limits of the City of Lago Vista which is within the jurisdiction of the city by virtue of the Municipal Annexation Act, Vernon's Annotated Civil Statutes, Article 970a.

~~Impervious Cover~~: Roads, parking areas, buildings, and other impermeable construction covering the natural land surface including but not limited to: all streets, driveways, buildings and structures within a development.

~~Landscaped Area~~: An area which has been enhanced by the use of plant material, planters, paving blocks, landscaping rock or water but not including poured concrete or asphalt.

~~Lot~~: Any legally platted lot, tract or parcel of land situated wholly or partially within the corporate limits of the City of Lago Vista, Texas.

~~Multifamily~~: Any development having more than two residential units on a single lot.

~~Plant Material~~: Grass, trees, shrubs, flowers, vines, groundcover or any other living matter.

~~Setback Distance~~: The minimum horizontal distance between the prop line and the front wall of any projection of a building, excluding uncovered steps, uncovered balconies, uncovered porches, and roof overhangs.

~~Shoreline~~: The edge of the water during normal level or flow conditions. In the case of Lake Travis, it is the six hundred eighty one (681) foot MSL contour. In the case on intermittent streams, it is the centerline of the waterway.

~~Site~~: Any legally platted lot situated wholly or partially within the corporate limits of the City of Lago Vista, Texas.

~~Street~~: The entire width between the boundary lines of every way publicly or privately maintained when any part thereof is open to the use of the public for purposes of vehicular travel.

~~Structure~~: Anything constructed or erected which requires location on or in the ground or attached to anything having a location on or in the ground that is of a permanent nature and such is a constructed or an erected object that is positioned on private property or in street right of way of the city.

~~Wastewater Disposal System~~: Any publicly or privately owned system for the collection, treatment, and disposal of sewage that is operated in accordance with the terms and conditions of a valid waste discharge permit issued by the Texas Natural Resource Conservation Commission or appropriate regulatory agency.

~~Water Supply System~~: The water facility infrastructure for the collection, treatment, storage and distribution of potable water from the source of supply to one or more consumers. The water system shall be designed in accordance with and approved by the Texas Natural Resource Conservation Commission and the City of Lago Vista.

#### **See 10.5.102 Site Development Plan Required**

~~A site development plan as provided for here and meeting the requirements of this article is required prior to the development or construction of any improvements on any lot that is zoned other than single family residential or two family residential, or that is intended for any use for any purpose or occupancy other than for single family or two family residential occupancy. A site development plan meeting the requirements of this article is not required in situation in which a single family residential or two family residential structure is to be constructed on any lot or other parcel of land that is zoned other than single family residential or two family residential.~~

#### **Sec 10.5.103 Purpose And Applicability**

- (a) Purpose. The site development plan provides detailed graphic information and associated text indicating property boundaries, easements, land use, streets, utilities, drainage, off street parking, lighting, signage, landscaping, vehicle and pedestrian circulation, open spaces, and general conformance with the master plan and ordinances of the city.
- (b) Applicability. This article shall apply to every person owning and/or proposing to develop a legally platted lot for any development other than single family or residential duplex within the City of Lago Vista. Water quality and detention requirements shall not apply to property in the C 4 zoning classification which are being developed for the lot owner's own use and is not part of a subdivision. Subdivisions within the C 4 zoning classification shall be subject to the water quality and detention requirements of this article. Water duality and detention requirements shall not apply to property in commercially zoned lots in the Travis Plaza subdivision which are being developed for the lot owner's own use. Resubdivision of the commercially zoned property within the Travis Plaza subdivision may, at the city council's discretion, subject the property to the water quality and detention requirements of this article. Recreational and recreation related facilities constructed on publicly owned properties will be exempt from this article at the discretion of the city council. Multifamily or commercial lots located within planned development districts shall not be exempt from the requirements of this article.
- (c) Other Requirements. Additional and related local ordinance requirements include, but are not limited to, the provisions within Chapter 3, Chapter 10, Chapter 11, Chapter 13, Chapter 14, and the Technical Construction Standard Specifications (TCSS) adopted as Ordinance Number 19-02-21-02 as amended. The TCSS is incorporated by reference herein and shall be deemed to have the same force and effect as if set forth in full herein.

#### **Sec 10.5.104 Format And Content**

- (a) Format. The site development plan shall be drawn on twenty four inch by thirty six inch (24"x36") sheets of paper at an engineering scale sufficient to thoroughly meet the informational requirements herein.
- (b) Content. The site plan shall include all of the land proposed to be developed or improved, and any off site improvements required to accommodate the project. The site development plan shall contain, or have attached thereto:
  - (1) A cover sheet showing:
    - (A) Names, addresses and phone numbers of the record owner or developer, and authorized agents including the architect, engineer, landscape architect, and surveyor (those applicable);

(B) The proposed name of the project;

(C) A location map showing the relation of the project to streets and other prominent features in all directions for a radius of at least one (1) mile using a scale of one inch equals two thousand feet ( $1''=2,000'$ ). The latest edition of the USGS 7.5 minute quadrangle map is recommended;

(D) The owner's name, address (including city, state and zip code), deed or plat reference and property lines of property within two hundred (200) feet of the lot boundaries as determined by the most recent tax rolls;

(E) Certifications and signature blocks as required by the city;

(F) The total acreage of the property to be developed;

(G) Current zoning district as defined by the current city zoning ordinance.

(2) An existing conditions plan, showing:

(A) Boundary of existing zoning districts, if applicable;

(B) The existing property lines, including bearings and distances, of the land being developed or improved. Property lines shall be drawn sufficiently wide to provide easy identification;

(C) The location of existing structures and improvements, if applicable;

(D) Significant trees of 12 inch caliper and larger, within the limits of the proposed on site and/or off site improvements;

(E) Centerline of water courses, creeks, existing drainage structures and other pertinent data shall be shown;

(F) Lines delineating the regulatory one hundred (100) year floodplain, if applicable;

(G) Topographic data indicating one (1) foot contour intervals. The contoured area shall extend outward from the property boundary for a distance equal to twenty five percent (25%) of the distance across the tract, but not fewer than fifty (50) feet nor more than two hundred (200) feet;

(H) The locations, sizes and descriptions of all existing utilities, including but not limited to: sewer lines, lift stations, sewer and storm sewer manholes, water lines, water storage tanks, and wells within the property, and/or adjacent thereto. Existing overhead and underground electric utilities shall also be shown;

(I) The location, dimensions, names and descriptions of all existing or recorded streets, alleys, reservations, easements, building setbacks or other public rights of way within the property, intersecting or contiguous with its boundaries or forming such boundaries, as determined from existing deed and plat records. The existing rights of way width, street pavement width, bar ditches, driveways on adjacent property and

~~driveways located across the street of any boundary street to the property shall also be shown;~~

(J) ~~Location of city limit lines and/or outer border of the city's extraterritorial jurisdiction, as depicted on the city's most recent base map, if either traverse the lot or is contiguous to the lot boundary.~~

(3) ~~An Erosion and Sedimentation Control Plan, showing:~~

(A) ~~Proposed fill or other structure elevating techniques, levees, channel modifications and detention facilities;~~

(B) ~~Existing and proposed topographic conditions with vertical intervals not greater than one (1) foot referenced to a United States Geological Survey or Coastal and Geodetic Survey benchmark or monument;~~

(C) ~~The location, size, and character of all temporary and permanent erosion and sediment controls with specifications detailing all on site erosion control measures which will be established and maintained during all periods of development and construction;~~

(D) ~~Contractor staging areas, vehicle access areas, temporary and permanent spoils storage areas;~~

(E) ~~A plan for restoration for the mitigation of erosion in all areas disturbed during construction;~~

(F) ~~All temporary and permanent erosion and sedimentation controls within the city shall be designed in accordance with the LCRA Lake Travis Nonpoint Source Pollution Control Ordinance Technical Manual, as amended.~~

(4) ~~A site plan, showing all visible improvements to the land, including:~~

(A) ~~The location, dimensions, square footage, height, and intended use of existing and proposed buildings on the site;~~

(B) ~~Location, number and dimensions of existing and proposed parking spaces, distinguishing between standard, handicap and van handicap spaces, and calculation of applicable minimum requirements;~~

(C) ~~The location, type and dimensions of proposed driveways, signs and traffic control devices.~~

(5) ~~A grading and drainage plan, showing:~~

(A) ~~A drainage area map delineating areas to be served by proposed drainage improvements;~~

(B) ~~Detailed design of all drainage facilities, including typical channel or paving section, storm sewers, detention ponds and other stormwater control facilities;~~

(C) ~~Accurate cross sections, plan and profiles of every drainage improvement proposed in a public utility easement and/or public right of way;~~

(D) Existing and proposed topographic conditions with vertical intervals not greater than one (1) foot referenced to a United States Geological Survey or Coastal and Geodetic Survey benchmark or monument;

(E) Attendant documents containing design computations in accordance with the city subdivision ordinance and this article, and any additional information required to evaluate the proposed drainage improvements;

(F) The City of Austin Drainage Criteria Manual, as amended (hereinafter the "Manual") is hereby adopted, save and except the following:

- (i) Preface;
- (ii) Paragraphs 1.2.4.E.2 and 1.2.4.E.11;
- (iii) Paragraphs 1.2.7;
- (iv) Paragraphs 1.4.0;
- (v) Paragraphs 1.5.0.3, 1.5.0.1, 1.5.0.5 and 1.5.0.6;
- (vi) Paragraphs 8.2;
- (vii) Appendix D; and
- (viii) All references to the City of Austin, including its departments, boards or divisions shall be the same departments, boards or divisions with the City of Lago Vista. Where such departments, boards or divisions do not exist within the City of Lago Vista, such references shall be construed to mean the city engineer of Lago Vista or other representative authorized by the city council of the city to perform such functions for the city.

(G) All drainage systems and improvements shall conform to the provisions and requirements of the manual and good engineering practices and shall show conveyance to off site drainageways, (for example, continuation of street bar ditch or natural drainageway);

(H) The site grading plan shall show and include the existing ground elevations and finish construction grades, including existing ground elevations for a minimum of 100' onto adjoining property, width of existing street right of way and existing pavement width;

(I) Drainage reports as shown in Exhibit "A" on file in the office of the city secretary. (Editor's note Exhibit A is now on file in the office of the Development Services Division.)

(6) A utility plan showing:

- (A) The layout, size and specific location of proposed water mains and other related structures and in accordance with all current city standards, specifications and criteria for construction of water mains;
- (B) The location of proposed fire hydrants, valves, meters and other pipe fittings;

- (C) Design details showing the connection with the existing city water system;
- (D) The layout, size and specific location of the proposed wastewater lines, lift stations, and other related structures, and in accordance with all current city standards, specifications and criteria for construction of wastewater systems;
- (E) Plan and profile drawings for each line in public rights of way or public utility easements, showing existing ground level elevation at centerline of pipe, pipe size and flow line elevation at all bends, drops, turns, station numbers at fifty foot intervals;
- (F) Detailed design for lift stations, special wastewater appurtenances, if applicable;
- (G) Utility demand data, and other attendant documents, to evaluate the adequacy of proposed utility improvements, and the demand on existing city utilities.

(7) A landscape plan showing:

- (A) Compliance with all ordinances requiring landscaping;
- (B) The layout size and specific location of proposed sprinkler systems as designed by a licensed landscape irrigator;
- (C) The following maintenance note: The developer and subsequent owners of the landscaped property, or the manager or agent of the owner, shall be responsible for the maintenance of all landscape areas. Said areas shall be maintained so as to present a healthy, neat and orderly appearance at all times and shall be kept free of refuse and debris. All planted areas shall be provided with a readily available water supply and watered as necessary to ensure continuous healthy growth and development. Maintenance shall include the replacement of all dead plant material if that material was used to meet the requirements of the subdivision regulations.

(8) Construction details, showing (when applicable):

- (A) Structural retaining walls and/or detention outlet structures;
- (B) Storm sewer manhole and covers, typical channel sections, inlets, safety end treatments and headwalls;
- (C) Wastewater manholes and covers, cleanouts, grease traps, pipe bedding and backfill;
- (D) Water valves, water meters, fire hydrants, thrust blocks, backflow prevention and concrete easement;
- (E) Driveways, curb and gutter, sidewalks, curb ramps, pavement sections and pavement repair;
- (F) Silt fence, rock berms, stabilized construction entrance, inlet protection;
- (G) Traffic controls when working in the public rights of way that comply with the Uniform Standards for Traffic Control Devices; and
- (H) Illumination structures.

(9) Each sheet shall have a legend identifying symbols, lines or other graphic representations.

**See 10.5.105 Standards And Specifications**

- (a) Cuts and Fills Less Than Four (4) Feet. Cuts and fills of less than four (4) feet may be subject to the approval of the city manager or his/ her designee. No fill material of less than four (4) feet in depth shall be placed or be in such an amount so as to restrict the city from being able to access utility lines within an easement. Any cut more than three (3) feet in depth shall install a fence or screening device in accordance with the zoning ordinance.
- (b) Cuts and Fills of Four (4) Feet or More. No fill on any building site shall exceed a maximum of eight (8) feet of depth, except for landscaping purposes. No cut of any building site shall be greater than eight (8) feet, except for structural excavation. Cuts and fills of four (4) feet or more shall require a soils report, prepared by a geo technical engineer, with recommended embankment slopes and/or slope stabilization such as retaining walls. The geo technical report shall also address that the adjacent property will not be impacted negatively by a cut or fill. The civil engineer shall address the drainage to and from the site and any permanent erosion controls required for the slope stability. Any cut more than three (3) feet in depth shall install a fence or screening device in accordance with the zoning ordinance. No fill material of less than four (4) feet in depth shall be placed or be in such an amount so as to restrict the city from being able to access utility lines within an easement.
- (c) Streets, Driveways, Roadways, Parking Areas, Alleys and Sidewalks. Streets, roadways, alleys, and sidewalks shall conform to standards contained in the city's standards of construction of streets and drainage in subdivisions as shown in exhibit "B" on file in the office of the city secretary.\*

**(1) Vehicular Access.**

- (A) Vehicular access to property from the public right of way shall be controlled in such a manner as to protect the traffic carrying capacity and safety of the street upon which the property abuts and access is taken, ensuring that the public use and purpose of public rights of way is unimpaired as well as protect the value of the public infrastructure and adjacent property.
- (B) The city manager may require the developer to submit a traffic impact analysis conducted by a qualified transportation engineer to determine the impact of a development on roads or streets.
- (C) On arterial and collector streets, or if necessary for the safe and efficient movement of traffic, all accesses shall be designed and constructed with physical improvements and appropriate traffic control measures to assist or restrict turning movements, including, without limitation, acceleration or deceleration lanes, access islands, street medians, and signage, as may be required of the development if the city manager or his/her designee finds that they are necessary to preserve the safety or the traffic carrying capacity of the existing street. The city manager or his/her designee shall determine the length and degree of the required access restriction measures for the property.

(2) If a traffic impact analysis is required, the site development plan must ensure that:

- (A) Proposed access and egress points have reasonable sight distances;

- (B) ~~No inordinately adverse impact will result on the nearest intersections;~~
- (C) ~~No unsafe traffic circulation or pedestrian problems will result;~~
- (D) ~~Surrounding land uses and driveways are not inordinately adversely affected;~~
- (E) ~~Rights of way width, pavement width, and street design are adequate for the number of vehicle trips projected per day, so as not to overburden the street system.~~

(3) Driveways and Parking Areas.

- (A) ~~The slope of a driveway shall not exceed twelve percent (12%) measured between the street end of the apron and the opposite end of the driveway.~~
- (B) ~~Driveways shall not be located within two hundred (200) feet from the intersection of a collector street and an arterial street, or two (2) collector streets that are identified in the city's master plan.~~
- (C) ~~Driveways and parking areas shall have an adequate base of compacted granular material and a wearing surface of hot mix asphalt, concrete, brickpavers, or reinforced concrete.~~
- (D) ~~Driveway and pavement designs shall be determined by a qualified soils testing and pavement design registered professional engineer. Total flexible thickness design shall be based on soil type, traffic loading and a twenty (20) year minimum design life.~~
- (E) ~~The number of parking spaces required shall conform to standards contained in the latest version of the zoning ordinance.~~
- (F) ~~The number of off street loading spaces shall conform to the latest version of the zoning ordinance.~~
- (G) ~~Parking areas for bicycle racks shall be at the discretion of the developer.~~
- (H) ~~Parking areas which necessitate backing out onto arterial streets or collector streets shall be prohibited.~~
- (I) ~~On street parking shall not be allowed.~~

(d) Water and Wastewater Systems. Water and wastewater systems shall conform to the latest versions of the subdivision ordinance.

(e) Landscaping. Landscaping shall conform to the following requirements:

- (1) ~~All plant materials used for landscaping shall be of healthy stock, preferably native or naturalized, with low water requirements.~~
- (2) ~~All areas which are not impervious cover shall be landscaped and a landscaping shall extend to the property lines.~~

(3) ~~Grass or groundcover may be installed in the rights of way contiguous to the site with the permission of the city or other relevant governmental authority. The owner of the site contiguous to the right of way shall be responsible for maintaining the grass or groundcover in the right of way.~~

(4) ~~Trees.~~

(A) ~~All trees required to be planted to meet the minimum tree requirement shall be at least two (2) inches in diameter and located at least three (3) feet from any impervious cover.~~

(B) ~~The site shall meet the type and number of trees to be planted, replaced or retained on the lot according to the latest version of the zoning ordinance.~~

(5) ~~All traffic islands or peninsulas shall be landscaped. Grass or grand [ground] cover shall not exceed eighteen (18) inches in height.~~

(6) ~~Except for landscaping in the rights of way, landscaped areas which are located adjacent to pavement shall be protected from vehicles with concrete curbs or concrete tire stops.~~

(7) ~~Existing oak trees shall be preserved to the extent reasonable and feasible. A list of the trees to be planted, replaced, retained or removed shall be submitted with the site plan and must be approved by the city manager or his/her designee.~~

(8) ~~Fifty percent (50%) of the landscaped areas must include living material. All disturbed areas must be re seeded with grass, groundcover or similar living matter.~~

(9) ~~All retaining walls, including but not limited to detention and/or filtration ponds, of three (3) feet or more shall require shrubbery and/or vines of healthy stock and of a minimum of two (2) feet in height immediately after planting in front of the retaining wall. All shrubbery and/or vines shall be planted and maintained so as to form a continuous, unbroken, solid, visual screen which will grow to the same height or more of the retaining wall.~~

(f) ~~Drainage and Erosion Control. Drainage improvements and erosion control measures shall comply with applicable provisions of Articles 3.1100 and 3.1400 of Chapter 3 and Section 4.112 of Chapter 10 of the Code of Ordinances.~~

(g) ~~Fences and Screening Devices. Fences and screening devices shall be installed, repaired and maintained according to the latest version of the zoning ordinance.~~

(h) ~~Illumination. All outdoor or exterior lighting shall comply with Article 3.800 of Chapter 3.~~

(i) ~~Pollution. Unless authorized by an appropriate governmental agency with powers superseding those of the city, there shall be no dumping or discharge of any waste, wastewater, chemicals, polluted liquids, toxic material, or any other substance which constitutes a known hazard to humans or animals, onto any property or into any waterway or stream, pond, or detention pond, during the development process or after its completion. During the development process, all developments shall have on site, rigid, tamper proof containers for the disposal of nonhazardous solid waste.~~

(j) Trash Storage and Recycling Areas. Trash storage and recycling areas for attached dwellings and all business and industrial buildings or uses shall be accommodated within the structure, or adequate area shall be included on site and indicated on a site plan. All outdoor trash recycling storage and containers shall be placed on hot mix asphalt, concrete, brick pavers or reinforced concrete and shall be screened from public view by a solid fence of no more than six (6) feet in height.

(k) Fire Hydrants. Fire hydrants shall conform to standards contained in the city's standards and location of fire hydrants shall be approved by the Travis County Fire Marshal.

(l) Prohibitions. Construction shall not be allowed in the street rights of way, public utility easements, drainage easements or other easements, or within the setback stance except for landscaping, sidewalks, landscape irrigation, or fences that are in accordance with the city's fence regulations.

(m) Special Planning Area (Property Located in the Former Austin ETJ).

(1) All subdivisions located in the special planning area, as defined in an interlocal agreement (the "agreement") between the City of Lago Vista and the City of Austin shall also meet the following requirements and should there be a conflict between the following requirements and the standards and specifications in this article, the more restrictive requirement shall apply:

(A) All single family development will be set back at least seventy five (75) feet from the 681 foot contour line above mean sea level, as established by the United States Geological Survey in effect as the date of the agreement between the City of Lago Vista and the City of Austin. All condominium units and commercial buildings (excluding marinas) will be set back at least 100 feet from said 681 foot contour line.

(B) Temporary erosion and sedimentation controls as required by the LCRA under Chapter 13, Article 13.600, Section 13.605(3) of the Lake Travis Nonpoint Source Pollution Control Ordinance in effect as of the date of the agreement will be implemented, designed, constructed and maintained according to the City of Austin Environmental Criteria Manual as determined by comparing calculations under the City of Austin's requirements with those under the proposed controls.

(C) Impervious cover will be limited to twenty percent (20%) of the total site area over the property for any lot developed with any retail, condominium, apartment or office commercial uses; provided that Lago Vista may approve impervious cover up to twenty five percent (25%) of the total site area for those lots that are connected to Lago Vista's centralized wastewater system. Total site area includes only those portions of a site that lie above the 681 foot contour line above mean sea level, as established by the United States Geological Survey in effect as of the date hereof.

(D) For residential lots in the planning area, density shall be subject to the following requirements:

(i) A minimum average lot size of one acre shall be maintained on all lots that are served by on site septic systems.

- (ii) Density of clustered lots served by on site septic systems may not exceed one single family unit per acre, provided that a minimum of 40% of the total site area is open space.
- (iii) Lago Vista may approve density not to exceed 1.5 single family units per acre for lots that are connected to Lago Vista's centralized wastewater system, provided that a minimum of 40% of the total site area is open space.
- (iv) Lago Vista may approve additional density not to exceed 2 single family units per acre for lots that are connected to Lago Vista's centralized wastewater system and for which a minimum of 40% of the total site area is open space according to the following requirements:
  - (1) One additional single family unit for every two acres of land dedicated by instrument acceptable to Lago Vista for irrigation of wastewater effluent;
  - (2) One additional single family unit for each acre of land permanently preserved by instrument acceptable to the city as undeveloped open space; or
  - (3) One additional single family unit for each living unit equivalent (LUE) of wastewater treatment capacity in excess of that required to serve the development that is used to disconnect existing on site septic systems.

(E) Cut and fill is limited to four feet (4') maximum, provided that cut and fill over four feet (4') shall be permitted if the cut/fill slope is terraced to control erosion and sedimentation.

(F) Detention of the two year storm for erosion control or, as an alternative, nonerosive conveyance of stormwater to Lake Travis, will be provided as required under City of Austin Land Development Code Chapter 25.7 drainage, and the City of Austin Drainage Criteria Manual.

(G) A building envelope that encompasses the limits of building disturbances will be established and required for residential construction on any lot.

(H) All of the 100 year floodplain located with the planning area shall be dedicated to the City of Lago Vista as a drainage easement in accordance with the City of Lago Vista's development rules.

(I) Development shall comply with the 2006 LCRA Highland Lakes Ordinance and the City of Austin's regulations regarding the Lake Travis Critical Water Quality Zone (LTWQTZ), and developers and homebuilders shall promote xeriscape landscaping and homeowners education program to reduce potential pollutant sources. The LTWQTZ is defined as the area along and parallel to the shoreline of Lake Travis, coinciding with the 681.0 foot contour line. Within the LTWQTZ development is prohibited, except that a boat dock, pier, wharf, or marina and necessary access and appurtenances is allowed. Within the LTWQTZ, approval by Lago Vista or an agency designated by the Lago Vista city council 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.~~

(J) ~~Lago Vista shall provide an annual status report to the director of the City of Austin Watershed Protection and Development Review Department of the options used by developers to obtain additional density, which report shall include the following:~~

- (i) ~~Developments that have connected to Lago Vista's wastewater system;~~
- (ii) ~~The number of septic systems that have been disconnected in the release area;~~
- (iii) ~~The number of acres dedicated for irrigation of wastewater effluent; and~~
- (iv) ~~The number of acres permanently preserved for open space.~~

**See 10.5.106 Procedure**

(a) ~~Procedure.~~ All required site development plans shall be submitted to the city for approval.

(b) ~~Submission.~~ All submission for site plan approval shall conform to the following requirements:

- (1) ~~A site development plan shall be submitted to the city manager or his/her designee at any time prior to the issuance of a building permit, subject to the provisions of this article, and along with the following:~~
  - (A) ~~Completed application forms and the payment of all applicable fees;~~
  - (B) ~~A letter requesting any variances from the provisions of this article;~~
  - (C) ~~Any attendant documents needed to supplement the information provided on the site development plan.~~
- (2) ~~City staff shall review all site development plan submittals for completeness within thirty (30) days of the receipt of the application. If, in the judgment of city staff, the site development plan submittal substantially fails to meet the minimal informational requirements as outlined above, the applicant will be notified of any additional information required. Once the application and related submittals meet minimal informational requirements the application shall be declared administratively complete and the technical review process will commence.~~
- (3) ~~City staff and the city engineer shall complete the technical review process within thirty (30) days. If, in the judgment of the city staff and city engineer, the site development plan fails to meet the technical standards for the city, the applicant will be notified of the deficiencies. Once the site development plan and related submittals are deemed to meet all technical standards, the application will be declared technically complete.~~
- (4) ~~Once the site development plan is determined to be technically complete, city staff and the city engineer shall review the plan for consistency with city codes, policies and plans. Should the city staff and the city engineer determine that the site development plan is in compliance with city codes, policies and plans and the applicant has made no requests for~~

~~variances from the city codes, policies and plans, the site development plan shall be approved.~~

- ~~(5) Should the city staff and/or city engineer determine that the site development represents a deviation from city codes, policies or plans, the site development plan shall not be considered approved and the city staff shall notify the applicant of the need to revise the site development plan or submit a request for variances for each item which deviates from city code, policies or plans.~~
- ~~(6) Site development plan approval by the city staff and engineer, as authorized herein, shall be evidenced by the authorized signature of the city manager and city engineer on the site development plan. Approval by the city staff and city engineer shall become effective immediately.~~
- ~~(7) Should the applicant request a variance or variances from city codes, policies or plans, the site development plan with the requested variances shall be scheduled for a public hearing and consideration before the city council. City staff or the city engineer shall prepare a report analyzing the site development plan submittal, and recommending either approval or disapproval of the site development plan and the requested variances. This report shall be available at least five (5) working days prior to the city council meeting.~~
- ~~(8) If the developer chooses to withdraw the site development plan, in writing to the city manager, by more than seventy two (72) hours preceding the city council meeting, it will not be considered. The submittal may appear on a future city council agenda after repayment of the applicable fees.~~
- ~~(9) It shall be the right of the applicant seeking site development plan approval, to appeal a decision of the city staff, for any reason whatsoever to the city council and have a final decision rendered by the city council.~~
- ~~(10) A site development plan may be rejected at any time subsequent to submittal and prior to final written approval for failure to meet the minimum informational requirements of this article.~~

**(e) Notification.** In all cases in which a site development plan is to be considered by the city council all owners of property (as determined by the most recent tax rolls from the Travis County Appraisal District), any part of which is located within two hundred (200) feet of the perimeter of the land to be developed, shall be notified by mail of the requested site development plan consideration. The city shall:

- ~~(1) Post signs along contiguous rights of way at each corner of the development and at intervals that do not exceed three hundred (300) feet between said corners;~~
- ~~(2) Publish a public notice at least once in a newspaper of general circulation in the city not fewer than fifteen (15) not more than thirty (30) days prior to said public hearing; and~~
- ~~(3) Mail public notification forms, postmarked no fewer than fifteen (15) days prior to the appropriate city council hearing, to the owners of all property, a part of which is located within two hundred (200) feet of the perimeter of the property included within the site development plan.~~

(d) Approval. The city council, after holding a public hearing shall act on the request for site development plan approval in accordance with the following:

(1) The failure of the city council to act within sixty (60) calendar days from the date that the site development plan was declared technically complete shall result in automatic approval of the plan, except as otherwise agreed to by the developer.

(2) Zoning of the tract that shall permit the uses proposed by the site development plan, or any pending zoning amendment necessary to permit the proposed uses shall have been adopted by the city council prior to approval of the site development plan.

(3) Site development plan approval by the city council, as authorized herein, shall be evidenced by the authorized signature of the mayor, city manager and city engineer on the site development plan. Approval by the city council shall become effective immediately.

(4) Upon disapproval of a site development plan, no application for site development plan approval for the same or substantially the same site development plan, on the same or substantially the same land proposed to be developed, shall be filed within one (1) year from the date of city council disapproval.

(5) A site development plan approval pursuant to these provisions shall run with the land and shall continue to be valid upon a change of ownership of the site or structure which was the subject of the application.

(6) The developer shall be responsible for specific approvals from other agencies as required.

(7) Approval of a site development plan shall authorize a developer to begin constructing site improvements. However, no building shall be constructed until a building permit has been issued.

(e) Expiration. Unless a longer time shall be specifically established as a condition of approval, a site development plan approval shall lapse and become void twelve (12) months following the date on which such approval became effective, unless prior to the expiration, building permit is issued and construction is commenced and diligently pursued toward completion.

(f) Revision. If a revision to the approved site development plan becomes necessary, whether requested by the city staff, the city council or the developer, then the site development plan shall be resubmitted and approved by city staff for compliance with this article.

(g) Extension. Site development plan approval subject to lapse may be extended if the developer submits a written request for extension to the city council thirty (30) days prior to the expiration date. The city council, at its sole discretion, may or may not approve an extension of up to one hundred and eighty (180) days after the original expiration date.

#### Sec 10.5.107 Enforcement Provisions

Any person violating any provision of this article within the corporate limits of the City of Lago Vista, Texas, shall be guilty of a misdemeanor, and upon conviction shall be fined an amount not exceeding two thousand dollars (\$2,000.00). Each day that such violation continues shall be a separate offense. Prosecution or conviction under this provision shall never be a bar to any other remedy or relief for violations of this article.

## **EXHIBIT A SITE DEVELOPMENT PLAN SUBMISSION REQUIREMENTS**

### **B.10 Variances**

~~When requesting a variance, a letter addressed to the City Manager which includes the subdivision name, address of the site, description of the variance and justification, and the applicable ordinance and section, should accompany the application.~~

### **B.11 Tag Plats**

~~If a variance is being requested, provide one blue line copy of each of the current tax plats, showing all properties within 300 feet of the tract. Include all maps referenced within the 300 feet. Outline the tract in red (DO NOT SPLICE MAPS TOGETHER). Tax plats are available at the Travis County Tax Appraisal District, Walnut Creek Business Park, 8314 Cross Park Drive (Hwy 290 East and Cross Park Drive, phone 834-9318.~~

### **B.12 Tax Certificate**

~~Tax certificates must be submitted with all subdivision and construction plan applications. These may be obtained from the County Tax Office located in the Courthouse Annex (N.W. corner of 10th and Guadalupe) and should indicate there are no taxes owning.~~

### **B.13 Engineer's Summary Letter - See Exhibit A-I**

Provide an original and three copies.

### **B.14 Geotechnical Investigation Report - See Exhibit A-H**

~~Submit two copies. This report may be submitted at a later date but no later than the submittal of construction plans for the second review.~~

### **B.15 Construction Plans - See Exhibit A-III**

~~Three complete, folded sets of construction plans are required. Four sets are required if the project is on a State Highway. The construction plans shall consist of the following (see requirements below for each Plan):~~

- ~~(a) Cover Sheet~~
- ~~(b) Final Plat~~
- ~~(c) Erosion and Sedimentation Controls~~
- ~~(d) Drainage and Utility Layout~~
- ~~(e) Street Plan and Profile~~
- ~~(f) Drainage Plan and Profile Sheets~~
- ~~(g) Detention, Filtration and/or Sedimentation Ponds~~
- ~~(h) Construction Details~~

### **B.16 Pavement Striping Plan**

If pavement striping is proposed, three copies of a striping plan are required. Four copies if the project is on a State Highway.

### **B.17 Drainage Report**

Two copies shall be submitted with the application and shall include the following:

- (a) source of floodplain information (calculations where applicable)
- (b) calculations supporting adequacy of existing and proposed on-site channels, storm sewers, and drainage structures
- (c) calculations supporting adequacy of detention pond size
- (d) calculations for floodplain modifications and cross sections
- (e) summary assessment of impact on adjacent properties and drainage structures
- (f) signature and seal of professional engineer on report
- (g) calculations of existing and fully developed flows
- (h) calculations of off-site flows
- (i) calculations of capacity of drainage facilities on adjacent properties affecting hydraulic performance in the subdivision

## **EXHIBIT B-1 ENGINEER'S SUMMARY LETTER**

### **B1A Acceptance Of Plans**

No construction plans will be accepted unless accompanied by a summary letter signed and sealed by the same registered Texas professional engineer who sealed the construction plans. The summary letter should describe the proposed development and might include, but not limited to, the following:

- (a) Acreage to be developed.
- (b) Type of development.
- (c) Explanation of any proposed project phasing.
- (d) Methods to be used for handling storm water runoff, i.e., drainage easements, channels, curb inlets, storm sewers, detention, sedimentation and filtration ponds, water quality control methods, etc.
- (e) Effect the proposed development will have on existing and future drainage systems in the area and on the natural and traditional character of the land and waterways.
- (f) Justification for exemption from the City's ordinances and standards.

## **EXHIBIT B-II GEOTECHNICAL INVESTIGATION REPORT**

### **BII.1 Number Of Copies**

Two copies of the Geotechnical Investigation Report shall be furnished prior to the second review of the plans.

### **BII.2 Pavement Design**

Pavement design shall be based on City of Austin Procedures for Street Paving Thickness Design (Subdivision Memorandum E 78-3 from DPWT) or the Municipal Pavement Structural Design and Life-Cycle Cost Analysis System (MFPS 1 S-1).

### **BII.3 Seal And Signature**

Show legible professional engineer's seal and signature.

## **EXHIBIT B-III CONSTRUCTION PLAN CHECKLIST**

### **BIII.1 Cover Sheet**

Show the following on the cover sheet:

- (a) Subdivision name on cover sheet in  $\frac{1}{2}$  inch or larger letters (use same name as on the final plat).
- (b) Legal description of property (lots, block, subdivision name).
- (c) Name, address and telephone number of owner and engineering firm preparing plans.
- (d) Project location map that clearly indicates precise location of the tract (4" x 4" minimum) with north arrow.
- (e) State Department of Highways and Public Transportation Stationing, for streets intersecting or adjacent to state maintained roadways.
- (f) Tabulation sheet index.
- (g) Legible professional engineer's seal and signature.

### **BIII.2 Notes**

Show the following:

- (a) One of the following notes:
  - (1) This project complies with the Lower Colorado River Authority Non Point Source Pollution Control Ordinance, as approved by the City of Lago Vista, or
  - (2) This project is EXEMPT from the Lower Colorado River Authority Non Point Source Pollution Control Ordinance, as approved by the City of Lago Vista.

(b) The following note: "All responsibility for the adequacy of these plans remains with the Engineer who prepared them. In approving these plans the City of Lago Vista must rely upon the adequacy of the work of the Design Engineer."

(c) Applicable City of Lago Vista General Construction Notes for subdivision construction.

(d) Tabulation of applicable Special Notes.

(e) Construction Sequencing.

### **BIII.3 Approval Blocks**

Show the following approval blocks:

(a) Signature block for TX DOT, if applicable

\_\_\_\_\_ Texas Department of Transportation \_\_\_\_\_ Date

(b) Signature blocks

Approved by:

\_\_\_\_\_ Review Engineer for the City of Lago Vista \_\_\_\_\_ Date

(c) Approved by:

\_\_\_\_\_ Travis County Fire Marshal \_\_\_\_\_ Date

(d) A revision block:

No. Revision Description Approved By Date

\_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

### **BIII.4 General Construction Notes**

(a) All construction shall be in accordance with the City of Austin Standard Specifications, as adopted and approved by the City of Lago Vista.

(1) Design Procedures are in complete compliance with the City of Austin Drainage Criteria Manual; or

(2) Design procedures are in general compliance with the City of Austin Drainage Criteria Manual and all variances to the manual are noted.

- (b) A minimum of one benchmark per site development to include description, location, and elevation. Tie to State Plane Coordinate System, when possible.
- (c) Prior to beginning construction, the owner or his authorized representative shall convene a Pre-Construction Conference between the City of Lago Vista, consulting engineer, contractor, and any other affected parties. Notify the Public Works Director, 267-1155, at least 48 hours prior to the time of the conference and 48 hours prior to the beginning of construction.
- (d) The contractor shall give the City a minimum of 48 hours notice before beginning each phase of construction, call the Public Works Director, 267-1155.
- (e) Barricades, built to City of Lago Vista Standard Specifications, shall be constructed on all dead-end streets and as necessary during construction to maintain job safety. (Streets, etc. may be listed in addition to or instead of note).
- (f) No blasting is permitted.
- (g) Any existing pavement, curbs, and/or sidewalks damaged or removed will be repaired by the contractor at his expense before acceptance of the site development.
- (h) The location of any water and/or wastewater lines shown on the plans must be verified by the City of Lago Vista Utility Crews.
- (i) Locate Existing Utilities, 48 hours BEFORE you dig. Local Utilities as follows:
  - (1) SWB (Telephone) 512-870-5217
  - (2) Heartland Wireless (Cable) 512-833-6299
  - (3) Time Warner Communications (Cable) 512-485-4000
  - (4) Pedernales Electric Cooperative (PEC) Engineering 512-331-992
  - (5) Underground Utility Locator 1-800-669-8344 or Fax 1-800-999-2344
- (j) All storm sewer pipes to be Class III RCP unless noted otherwise.

#### **BIII.5 Special Notes**

Notes for Plans where applicable:

- (a) The subgrade material in (name of subdivision) was tested by (name of professional soil lab) in (day, month, and year) and the street section designed according to current City of Austin Design Criteria. The street sections are to be constructed as follows (Give street names, width of R.O.W., or other methods to identify proposed design of different pavement thickness. In writing or graphically, describe the street section(s) to be constructed):
  - (1) Manhole frames, covers, and water valve covers will be raised to finished pavement grade at the owner's expense by a qualified contractor with City Inspection. All utility adjustments shall be completed prior to final paving construction.

- (2) At intersections which have valley drainage, the crowns of the intersecting streets will culminate in a distance of 40' from the intersecting curb line unless otherwise noted. Inlets on the intersecting street shall not be constructed within 40 feet of the valley gutter.
- (3) Sidewalk requirements (give street name and location of required sidewalk, i.e., north, south, east, or west side).
- (4) A curb lay down is required at all points where the proposed sidewalk intersects the curb.
- (5) When using lime stabilization of sub grade, it shall be placed in slurry form.
- (6) Inside the city limits, sidewalks shall be completed prior to acceptance of any Type I or Type II driveway approaches and/or issuance of a Certificate of Occupancy. Sidewalks adjacent to "common areas," parkways, or other locations on which no building construction will take place, must be constructed prior to final acceptance of the subdivision.
- (7) A storm water management facility maintenance agreement for single family and duplex residential lots will be executed and recorded prior to final acceptance of this subdivision.
- (8) A license agreement for landscaping maintenance and irrigation in street R.O.W. shall be executed by the developer in party with the City prior to final acceptance of the subdivision.

### **BIII.6 Construction Sequencing**

- (a) Call City of Lago Vista, Public Works Director, 267-1155, 48 hours prior to beginning any work. Call the appropriate.
- (b) Install temporary erosion controls and tree protection fencing prior to any clearing and grubbing. Rough grade streets. No development of embankment will be permitted at this time.
- (c) Install all utilities to be located under the proposed pavement.
- (d) Begin installation of storm sewer lines. Upon completion, restore as much disturbed area as possible, particularly channels and large open areas.
- (e) Regrade streets to sub grade.
- (f) Insure that all construction site improvements and underground utility crossings are completed. Lay first course base material on all streets and parking areas.
- (g) Install curb and gutter.
- (h) Lay final base course on all streets.
- (i) Lay asphalt.
- (j) Complete all underground installations within the R.O.W.
- (k) Complete final grading and restoration of detention, sedimentation/filtration ponds.
- (l) Complete permanent erosion control and restoration of site vegetation.

(m) Remove and dispose of temporary erosion controls.

### **BIII.7 Drainage Layout**

Show the following:

- (a) Drainage layout of subdivision (scale: 1" = 100') with north arrow to top or right of sheet and show limits of construction as a distinguishable line.
- (b) Existing adjoining street layout or other property adjacent to project (show adjacent subdivision names).
- (c) Street names, lot and block numbers and R.O.W. lines.
- (d) Location of all existing drainage structures on or adjacent to project.
- (e) Existing contours at two foot minimal intervals.
- (f) Individual drainage areas and upstream drainage areas based on improvements and final grading (distinguish these areas by heavy dashed lines).
- (g) Size in acres, C, I, tc, and Q for 25 and 100 year storm for each specific drainage area.
- (h) Arrows indicating flow direction for streets and lots.
- (i) Summation of Q's at pertinent points (street intersections, inlets, passing inlets, headwalls, control outlet structures, etc.)
- (j) All low and high points.
- (k) All street and lot fill areas (usually done by shading).
- (l) Proposed drainage facilities (identify route of drainage from site to nearest waterway).
- (m) All existing and proposed drainage easements as per final plat or by separate instrument.
- (n) Q's leaving proposed streets onto surrounding property and Q's entering proposed streets from surrounding property.
- (o) Existing and proposed 100 year floodplains for all waterways.
- (p) Minimum building slab elevations for lots on which the 100 year floodplain encroaches (only if elevations are not shown on approved/released final plat included with plans).
- (q) The name of the engineering firm who prepared plans, the subdivision title and the name or initials of the design engineer and checking engineer.
- (r) Provide the following for each drainage area (see following pages for standard form of calculations tables):

- (1) ~~Runoff Calculations: Flow distribution and percent (%) that flows on street, over land and in gutter; tc (time of concentration in minutes); A (drainage area); I 25; C25; Q25; I100; C100; Q100~~
- (2) ~~For inlet design: Clogging factor required inlet type (i.e. 10' TYPE I or I R) as per detail; Y (depth of flow in gutter); a (gutter depression @ inlet throat); Q Cap (inlet capacity); inlet area A; inlet tc; composite "C" value used; Q @ inlet.~~
- (3) ~~For storm sewer design: tc's, areas, composite "C" value (if a uniform time of concentration for the system is not used); clearly show limits of construction.~~
- (s) ~~Legible professional engineer's seal, signature, and date of signing.~~
- (t) ~~All variances to City of Austin Drainage Criteria Manual and other policies.~~
- (u) ~~The following note on all sheets: "All responsibility for the adequacy of these plans remains with the Engineer who prepared them. In approving these plans, the City of Lago Vista must rely upon the adequacy of the work of the Design Engineer."~~

### **BIII.8 Street Plan**

Show the following:

- (a) ~~The street name and sheet number in the right corners.~~
- (b) ~~North arrow to top and right of sheets.~~
- (c) ~~Stationing south to north or west to east with street layout directly over the profile stationing.~~
- (d) ~~Scale: 1"=20', or 1"=40' for very large projects and paving dimensions (face to face of curb).~~
- (e) ~~Lot numbers, block numbers and frontage dimensions (dimensions required only if approved/released final plat is not included with the review plans).~~
- (f) ~~Street names within respective R.O.W.~~
- (g) ~~Existing or proposed easements and intersecting R.O.W.~~
- (h) ~~Sidewalks and assignments as per City of Lago Vista and final plat requirements.~~
- (i) ~~Centerline "TIC" marks, every 50 feet.~~
- (j) ~~Drainage facilities within or intersecting R.O.W. and indicate stationing on both sides of inlets (show inlet type and label storm sewer lines, i.e. LINE "A", M.H., etc.)~~
- (k) ~~Existing drainage facilities as dashed lines.~~
- (l) ~~Drainage flow arrows, high and low points.~~
- (m) ~~Match lines on street plan sheets for continuation of streets on other streets.~~
- (n) ~~As a minimum, a 50 foot extension of proposed streets and show proposed tie in to existing streets.~~

- (o) Sheet numbers for intersecting streets, and show full intersection, provide dimensions, and give street names.
- (p) Stations equation along CL (centerline) intersections of streets.
- (q) Barricades if required.
- (r) Plan view must transpose directly above profile stationing when possible (otherwise, center the midpoint of the curve on the sheet) (limits shown on the plan view must be the same as the limits shown on the profile).
- (s) Labeled asphalt valley gutter or concrete valley gutter (required if % grade <1.2%) at intersections where appropriate.
- (t) Clearly show the beginning and ending of project.
- (u) Limits of gutter depression by shading and showing stationing or dimensioning.
- (v) Clearly show all PC, PT, CC, or PRC stations.
- (w) All fill areas.
- (x) Horizontal curves conforming to the most recent City of Lago Vista Street Standards.
- (y) Legible professional engineer's seal, signature, and date of signing.

### **BII.9 Street Profile**

Show the following:

- (a) Legend and scale (scale: 1"=2', or 4' Vertical, usually 1/10th of Horizontal).
- (b) Even stations on heavy vertical division lines.
- (c) Even elevation heavy vertical division lines.
- (d) Even elevation in right and left margins.
- (e) Street profile for minimum of 50 feet beyond end of project (include property lines and proposed future grade and/or existing street grade).
- (f) Existing left and right R.O.W. profiles.
- (g) Proposed top curb (TC) profiles a minimum of two line widths to stand out from other profile lines.
- (h) Proposed TC elevations (clearly identify right and left).
- (i) Identify and give elevations at all PC, PT, PRC, PCC, PVC, PVI, or DVT stations (show by circle or heavy dot).

- (j) Vertical curves with the following information: curve length, PVI stations and elevation, tangent intercept, tangents and tangent grades (show elevations every 25 feet maximum along vertical curves).
- (k) Curb returns PC, MID PT, PT, with tangent and grade past point of return.
- (l) Elevations every 50 feet (i.e. +00 and +50) along the street profile.
- (m) Maximum curb split of 2% (30' street = 0.60', 44' street = 0.88') if applicable.
- (n) Vertical curves conforming to latest City of Lago Vista Street Standards, or AASHTO Green Book Criteria.
- (o) Submit letter of understanding for street lighting in sag curves and confirmation of availability of fixed source lighting when applicable.

### **BIII.10 Drainage Plan**

(Plan view must transpose directly above profile stationing). Show the following:

- (a) Street layout and name, lot layout and numbers (where storm drainage occurs).
- (b) Drainage easements.
- (c) Storm drainage facilities. Label and give sizes [i.e.: line "A-18" RCP, channel "B" r' FB(Flat bottom), 2 10' x G MBC, etc.]
- (d) All horizontal PI PC, PT, BEGIN and END stations and pipe and/or channel intersection equations.
- (e) All inlets, Q at inlets, Q passing inlets, and flow lines.
- (f) PI deflection angle in degrees.
- (g) North arrow to top or right of sheet and show scale (scale: 1"=50').
- (h) Any storm sewer assignments off R.O.W. or centerline.
- (i) Channel and/or pipe riprap and type of headwalls (show erosion control measures (dissipater blocks, rock riprap, etc.)
- (j) Beginning, end stations, for erosion control material used for channels (label type of material to be used, i.e. dry stacked or mortared rock, etc.)
- (k) Bottom width, side slopes, concrete trickle or pilot channel, height of channel lining if used, maximum and minimum depth of channel, Manning's "n" valve used, and station to station section of typical channels/scale section.
- (l) Note 100 year overflow swales over pipe system (when used) and give typical detail.
- (m) Open channels with a minimum flat bottom width of six feet.
- (n) Legible professional engineer's seal and signature.

- (o) All variances to City of Austin drainage Criteria Manual and other policies.
- (p) The following note on all sheets: "All responsibility for the adequacy of these plans remains with the Engineer who prepared them. In approving these plans, the City of Lago Vista must rely upon the adequacy of the work of the Design Engineer."

### **BIII.11 Drainage Profile**

Show the following:

- (a) Scales: horizontal (same as Plan, Vertical, 1/10th of horizontal scale).
- (b) Stationing proceeding from low end to high end from left to right for channels or storm sewer lines.
- (c) Existing ground profile at proposed channel locations.
- (d) Top of bank left and right, and fill areas for channels.
- (e) All stations and elevations at points of intersecting drainage lines, grade breaks, riprap, drop sections, toe of splash pads, toe of slope, beginning of slope, and beginning of riprap.
- (f) Q25, V25, HGL25, depth (d25), Q100, V100, HGL100, depth (d100), and Head losses (H), for each segment of channel.
- (g) Clearly show the beginning and end of construction and show stations or channels.
- (h) Flow line elevation every 50 feet maximum (i.e. +00, +50).
- (i) Elevations at inlets on storm sewer lines.
- (j) Grade of flow line (in %), and pipe sizes (label all pipes as RCP for storm sewer lines).
- (k) Q25, V25, HGL25, depth (d25), Q100, V100, HGL100, depth (d100), and Head losses (H), and df (when pipe is flowing full) for storm sewer lines.
- (l) Stations and elevations at PI, PC, PT, grade breaks, intersecting lines and beginning and end of construction for storm sewer lines.
- (m) All riprap, headwalls, etc. at pipe ends.
- (n) Full channel section at pipe ends when appropriate.
- (o) Existing and finished ground line and fill areas at pipe centerline for storm sewer lines.

### **BIII.12 Detention Pond**

Show the following:

- (a) Include drainage area map for detention ponds in plans.
- (b) Typical cross section of ponds.

- (e) ~~Summary table of supportive calculations for hydrology, hydraulics, hydrographies, control outlet structures, etc.~~
- (d) ~~Legible professional engineer's seal and signature.~~

### **BIII.13 Construction Detail**

~~Use City of Lago Vista Typical Standards, or the equivalent, for any structures such as street inlet and sidewalks. Show the following:~~

- (a) ~~Manhole or junction box detail.~~
- (b) ~~Pipe end riprap or headwall details.~~
- (c) ~~Channel lining.~~
- (d) ~~Culvert box and headwall details to meet Texas Department of Transportation requirements for concrete strength and structural reinforcing.~~
- (e) ~~Traffic/pedestrian guard railing details (when applicable).~~
- (f) ~~Other details as needed for construction.~~
- (g) ~~Legible professional engineer's seal and signature.~~
- (h) ~~The following note on all sheets: "All responsibility for the adequacy of these plans remains with the Engineer who prepared them. In approving these plans, the City of Lago Vista must rely upon the adequacy of the work of the Design Engineer."~~