CITY OF WEST LAKE HILLS, TEXAS
NOTICE OF CITY COUNCIL WORKSHOP
Wednesday, March 4, 2026 at 12:00 PM

Notice is hereby given that the City Council of the City of West Lake Hills, Texas, will hold a Workshop on the 4th day of March 2026 at 12:00 p.m., in the Council Chambers, Municipal Building, 4010 Bee Cave Road, West Lake Hills, Texas, at which time the following items will be discussed, to-wit:

1. Call to Order

2. Citizen Communications The City Council welcomes public comments at this point on any issue. If the issue is listed on the agenda, the speaker may choose to comment during the Public Comment period or when the specific agenda item is taken up by the Council later in the meeting. The Council cannot respond to or discuss matters not listed on the agenda. The Council may provide factual information, refer the item to a staff member, or request the item be added to a future meeting agenda. Speakers shall limit their comments to five (5) minutes each.

3. Administration Discuss the City of West Lake Hills Strategic Plan, 2025-2027.

4. Public Works Discuss AI traffic signal status.

5. Staff Briefing Discuss proposed code amendments to Chapter 22 Building and Chapter 38 Zoning.

6. Staff Briefing Discuss proposed revisions to the Drainage and Erosion Control Design Manual and related city code provisions.

7. Adjournment

Approved by: James Vaughan, Mayor

Certificate

I certify that the above Notice of the March 4, 2026 City Council Workshop was posted on the

bulletin board at the Municipal Building, 4010 Bee Cave Road, West Lake Hills, Texas on Thursday, February 26, 2026 by 5:00 pm. and will remain posted continuously until said meeting is convened.

Signed by: Makayla Rodriguez, City Secretary

The City of West Lake Hills is committed to compliance with the Americans with Disabilities Act. Reasonable accommodation and equal access to communications will be provided upon request.

All items on the agenda are for discussion and/or action. City Council reserves the right to adjourn into executive session at any time during the course of this meeting to discuss any of the matters listed above, as authorized by Texas Government Code Sections 551.071 (Consultation with Attorney), 551.072 (Deliberations about Real Property), 551.073 (Deliberations about Gifts and Donations), 551.074 (Personnel Matters), 551.076 (Deliberations about Security Devices), and 551.086 (Economic Development).

City *of* West Lake Hills
City Council

AGENDA REPORT

Meeting Date:	March 4, 2026	**Item Number:**	4
Department:	Administration		
Prepared By:	Trey Fletcher, City Administrator	**Cost / Budget:**	
Exhibits:	Supplemental info	**Source of Funds:**	

Subject

Discuss AI signal status.

Recommendation

Discuss only, no action is being requested.

Discussion

See attached.

No Traffic Answers to Council Questions for March 4 Workshop:

1. Council requested economic benefit analysis of current No Traffic installations. Please find chart below - % delay indicates the percentage reduction in delays at intersections after No Traffic systems and optimization were installed:

Agency	Intersections	Overall Avg. Delay %	Delay at Key Loc %	AM Delay	PM Delay	Total Volume	Economic Benefit / 5yr	Economic Benefit / 5yr Per Intersection
City of Phoenix	5	10%	—	13%	29%	48,000	$12,400,000	$2,480,000
City of Kelowna	5	12%	40%	8%	14%	35,000	$8,200,000	$1,640,000
City of Kirkland	6	12%	48%	13%	22%	50,000	$7,400,000	$1,233,333
Oklahoma City	5	24%	41%	11%	20%	49,000	$35,300,000	$7,060,000
Collier County, FL	9	22%	—	27%	30%	80,000	$91,500,000	$10,166,667
City of Houston	10	15%	52%	15%	11%	34,600	$41,400,000	$4,140,000
City of Phoenix	4	37%	—	28%	24%	38,000	$3,600,000	$900,000

2. Council requested the formula behind economic benefit. Please find an explanation below:

How the Total Economic Value Is Calculated

The Total Economic Value represents the combined financial benefit of:

1. Time savings for drivers (primary benefit)
2. Fuel and emissions reductions
3. Operational and hardware cost savings

All benefits are calculated annually and have been extended over the five-year service term for inclusion in the chart above.

Time Savings (Primary Benefit)

Economic value is first calculated by measuring the total annual vehicle-hours of delay reduced. That delay is converted into dollars using nationally recognized transportation assumptions:

- **Value of Time:** $19.64/hr -> $24.01/hr (https://mobility.tamu.edu/umr/media-information/answers-to-many-of-your-questions/)
- **Average Vehicle Occupancy:** 1.25 persons per vehicle

Annual delay hours × Value of Time × Occupancy = Annual Time Savings Value

This component typically represents the vast majority of total economic benefit.

Fuel and Emissions Reduction

Reduced delay also lowers fuel consumption and emissions, using standard benchmarks such as:

- **4.6 metric tons of CO_2 per vehicle per year** (U.S. EPA)

Operational and hardware cost savings

Additional economic value includes avoided or reduced agency costs, such as:

- **Signal retiming:** ~ $4,500 per intersection
- **Signal performance/analytics software:** ~ $4,400 per intersection
- **Persistent PTZ cameras:** ~ $2,500 per camera
- **24/7 operations support (NOC/TMC equivalent staffing):** Based on FHWA staffing guidance and a conservative salary assumption of ~ $58,000 per year, adjusted to a fractional full-time equivalent.

3. Council requested references from past clients. Please find videos from public meetings with officials discussing their experience with No Traffic Below.

- City of Kelowna Regular Council Meeting Section 4.7 (July 21, 2025)
- Pima AOG TSSS Meeting (May 8, 2025)
- Collier County First Coast ITE Presentation (July 8, 2025)

4. Council requested confirmation that we would have access to data generated by No Traffic. Email has been sent to TXDot Director of Operations Brenda Guerra to confirm.

City *of* West Lake Hills
City Council

AGENDA REPORT

Meeting Date:	March 4, 2026	**Item Number:**	5
Department:	Administration		
Prepared By:	Trey Fletcher, City Administrator	**Cost / Budget:**	
Exhibits:	n/a	**Source of Funds:**	

Subject

Discuss proposed code amendments to Chapter 22 Building and Chapter 38 Zoning.

Recommendation

Discuss only, no action is being requested.

Discussion

The focus of the proposed changes is intended to address procedural and contextual site issues, removing points of friction from the residential development and remodeling processes. Running concurrently with this process is building code updates that overlap these textual changes.

City *of* West Lake Hills
City Council

AGENDA REPORT

Meeting Date:	March 4, 2026	**Item Number:**	6
Department:	Administration		
Prepared By:	Trey Fletcher, City Administrator	**Cost / Budget:**	
Exhibits:	Proposed checklists, flowcharts and watercourse exhibit.	**Source of Funds:**	

Subject

Discuss proposed revisions to the Drainage and Erosion Control Design Manual and related city code provisions.

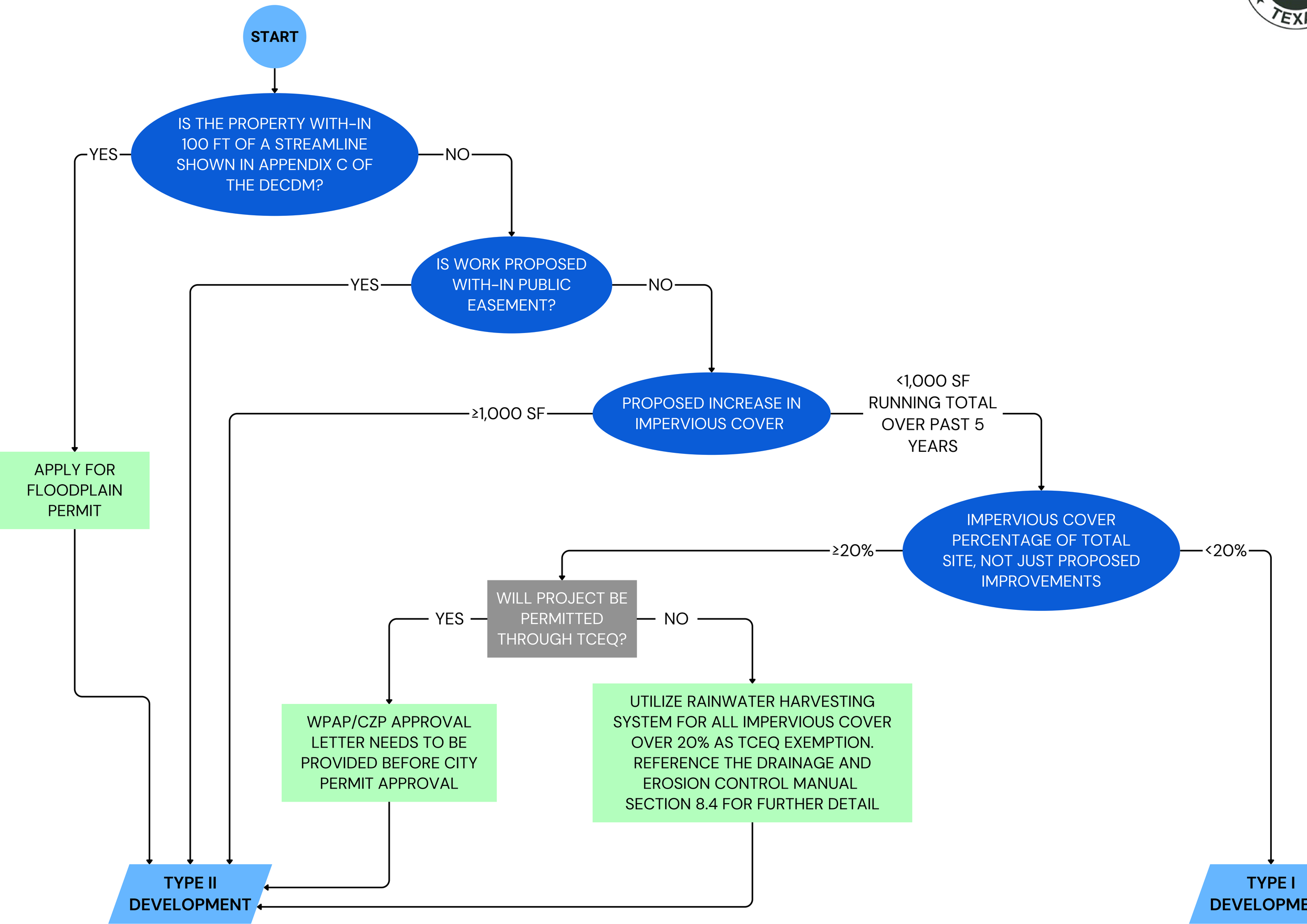
Recommendation

Discuss only, no action is being requested.

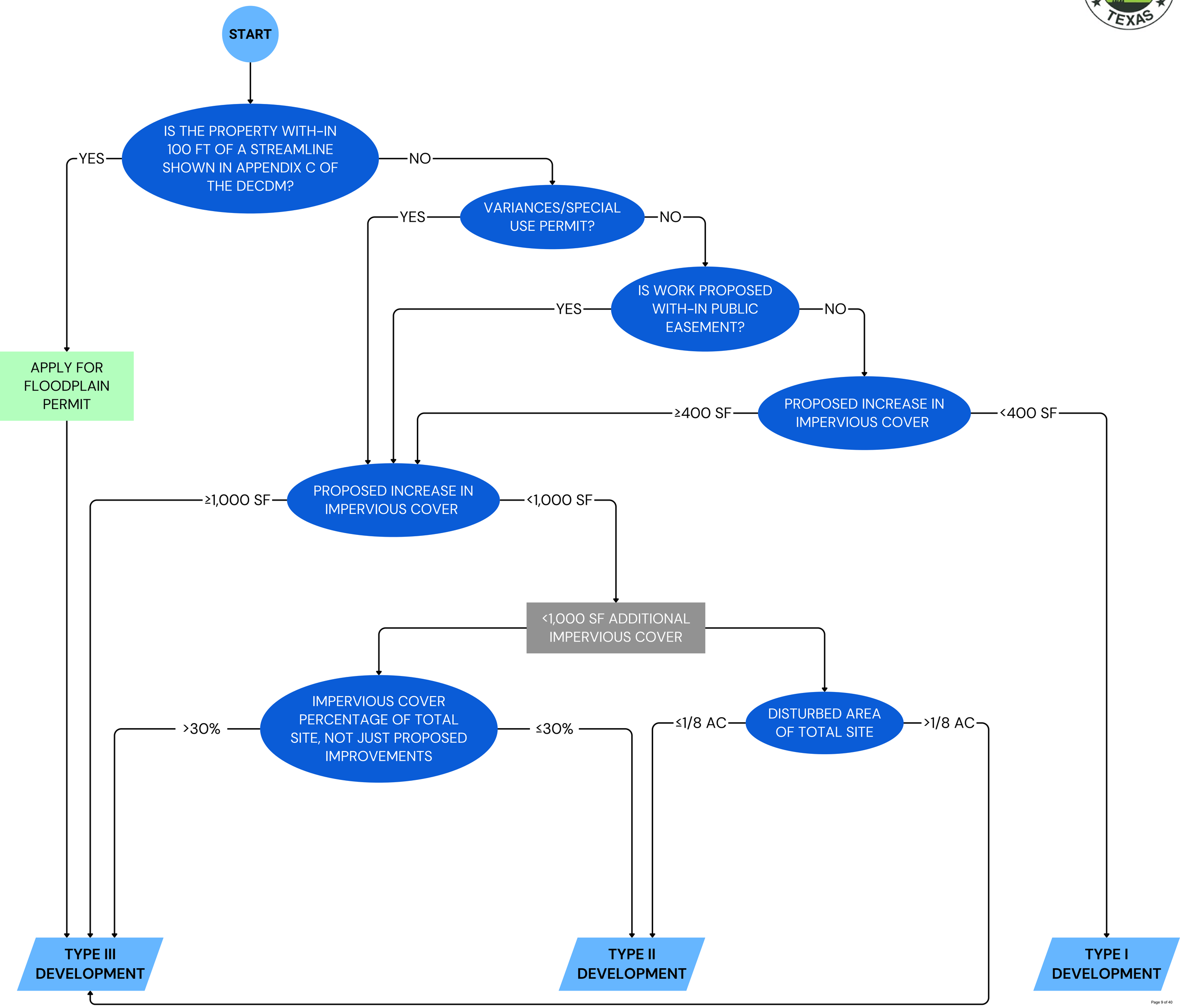
Discussion

The draft of proposed changes to the Drainage and Erosion Control Design Manual is currently under review. Supporting documents created to complement the revisions and desired outcomes are attached, including checklists, flow charts and a watercourse exhibit.

RESIDENTIAL DEVELOPMENT FLOWCHART



NON-RESIDENTIAL DEVELOPMENT FLOWCHART



DECLARATION OF EASEMENT(S)

THIS DECLARATION OF EASEMENT(S) made this ____ day of _____20___ by_____ (Grantor).

WHEREAS, the Grantor covenants it is the owner-in-fee of a certain tract or parcel of land situated in the_____, _____, more particularly described as (include legal description):

ALL THAT

_____

_____

_____;

IT BEING the same property conveyed to the Grantor by deed from _____, dated _____, and recorded in the Clerk's Office of the _____, _____, in Deed Book _____, at page _____;

WHEREAS, the Grantor wishes to create perpetual, nonexclusive, private drainage easement(s) for the benefit of the lots and parcels shown on the subdivision plat for "_____" recorded in the _____, _____, in Deed Book _____, at page _____, which easement(s) shall be for the purpose of installation and maintenance of private storm drainage facilities and for the collection and transmission of private storm water through and across the area designated "private drainage easement" on said plat and/or shown on

the attached sketch marked "Exhibit A," entitled "_____

_____."

NOW, THEREFORE, in consideration of the mutual benefits accruing to the Grantor and to future owners of the lots and parcels hereinabove described, the Grantor does hereby declare, create and constitute a perpetual, nonexclusive, private drainage easement over and across the side and rear of lot(s) _____ through ____ inclusive, as shown on the subdivision plat and/or exhibit referenced above, for the purposes referenced in the recital clauses of this document which are incorporated herein by reference.

The private drainage easement(s) is for the purpose of conveying storm water drainage from upstream and adjacent lots. Grantor, its successors, and assigns shall not use the private drainage easement in any way that will impair the rights of others to use it, and shall not obstruct drainage thereon.

Maintenance shall be the responsibility of the above referenced lot owners unless the City expressly accepts the easement for public use. The owners of the above referenced lot(s) shall have the right to inspect the said drainage easement and to cut and clear all undergrowth and other obstructions within the said drainage easement thereto that may in any way endanger or interfere with the proper use of the same.

The private drainage easement(s) shall run with the land and shall be for the benefit and use of the owners of the lots and parcels shown on the subdivision plat referenced above, their heirs and assigns, and for the benefit and use of the Grantor and its heirs, successors and assigns.

By execution of this Declation of Easement, the Grantor warrants that all approvals and releases which must be secured from interested parties, including but not limited to, noteholders

and trustees, necessary to make this conveyance have been obtained, and the signer of this document warrants that (s)he has due authority to bind Grantor.

WITNESS the following signatures and seals:

_____ (SEAL)

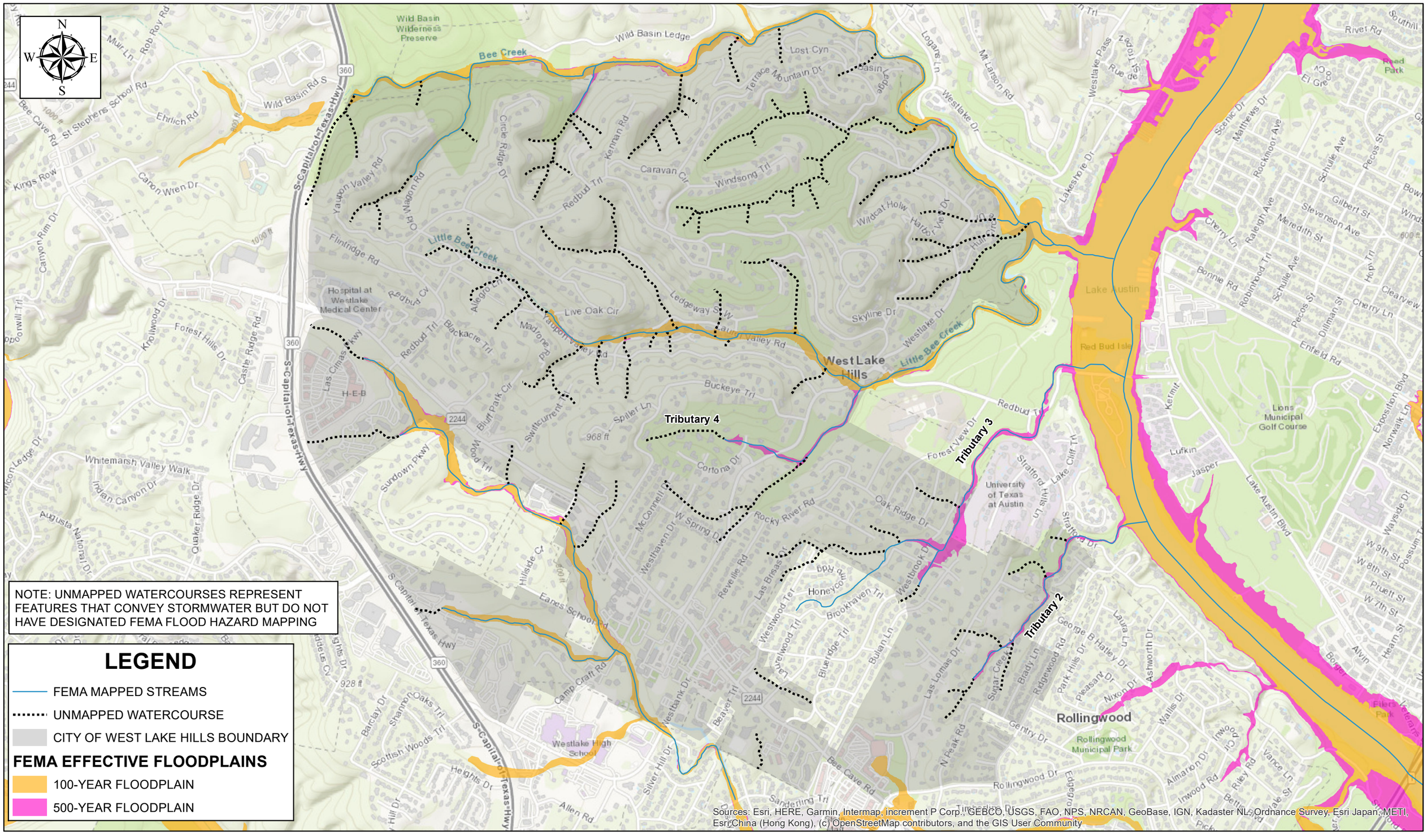
_____

CITY OF _____, to-wit:

I, the undersigned, a Notary Public in and for the _____, do hereby certify that _____ _____, whose name(s) is/are signed to the foregoing deed, dated the ___ of _____, 20_____, have acknowledged before me this ___ _____ day of _____, 20_____.

_____ (SEAL)
Notary Public

My commission expires: _____ Registration No: _____



NOTE: UNMAPPED WATERCOURSES REPRESENT FEATURES THAT CONVEY STORMWATER BUT DO NOT HAVE DESIGNATED FEMA FLOOD HAZARD MAPPING

LEGEND

- FEMA MAPPED STREAMS
- UNMAPPED WATERCOURSE
- CITY OF WEST LAKE HILLS BOUNDARY

FEMA EFFECTIVE FLOODPLAINS

- 100-YEAR FLOODPLAIN
- 500-YEAR FLOODPLAIN

CITY OF WEST LAKE HILLS WATERCOURSE EXHIBIT

CHECKLIST FOR TYPE I RESIDENTIAL & NON-RESIDENTIAL DEVELOPMENTS

Project Name/Address:_____**Permit Number:** _____

The following information shall be shown on the plans and/or submitted with the plans:

COVER SHEET

___1. Project name, legal description, existing and proposed zoning, and type of plans included
___2. Location map with north arrow, scale, and location of jurisdictional boundaries
___3. The name, address and phone number of the Applicant/record owner
___4. Standard signature block for City acceptance located on website

PROJECT NOTES

___1. The West Lake Hills Standard Construction Notes located on the City website
___2. A sequence of construction

SITE PLAN

___1. Property lines, address, land use, and zoning of adjacent properties
___2. Name and location of existing and proposed easements, right-of-way, streets, pipelines, water courses, etc. within or abutting the lot where development
___3. Required front, side and rear setbacks as defined in the Ordinance Sec 22.03.281
___4. Current and certified tree survey including tree table with size and species
___5. North arrow, north to be at top of sheet if possible
___6. Legend with all acronyms defined
___7. Scale bar and numeric scale, in generally accepted engineering scale. Minimum scale 1"=50'
___8. Existing features and proposed/future improvements.

EROSION AND SEDIMENTATION CONTROL PLAN

___1. Location of disturbed area
___2. Contractor staging areas, vehicle access areas, temporary and permanent spoil storage areas
___3. The location, size, and character of all temporary and permanent erosion and sediment control facilities

DRAINAGE MEMO

___1. Drainage memo prepared by the property owner or its agent per Drainage and Erosion Control Manual 2.1.2.1 criteria.

WATER QUALITY

___1. Edwards Aquifer Zone Designation (Contributing or Recharge). Development and redevelopment located over the Edwards Aquifer Regulatory Zones shall comply with the latest TCEQ published rules and technical design guidance for the Edwards Aquifer in accordance with 30 TAC Chapter 213 (Edwards Aquifer Rules).
___2. All single-family residential developments with impervious cover above 20% must provide water quality treatment for both the Recharge and Contributing Zones. Must include two impervious cover tables: one addressing Building Rules/Drainage Mitigation and a second for water quality determination.

I hereby confirm that this application is complete and all required information is attached. I further agree to comply with all platting and subdivision design requirements of the City of West Lake Hills. I understand that the permit will not be issued unless staff comments are satisfactorily addressed.

_____ _____

Signature of Owner/Applicant Date

_____

Print Name & Title

GENERAL NOTES

1. All materials and construction methods for site grading, paving, sitework, and drainage shall be in accordance with the current City of Austin Standard Specifications, unless otherwise noted. All work shall be in accordance with the building codes, ordinances, safety codes, and rules and procedures of the City of West Lake Hills.
2. All responsibility for the adequacy of these plans remains with the Engineer who prepared them. In reviewing these plans, the City of West Lake Hills must rely on the adequacy of the work of the design engineer.
3. Prior to any construction, the Contractor shall apply for and secure all proper permits from the appropriate authorities.
4. Blasting or burning shall not be permitted on this project.
5. The contractor shall verify all depths and locations of existing utilities prior to beginning construction. Any discrepancies with the construction plans found in the field shall be brought to the attention of the design engineer immediately. The design engineer shall be responsible for revising the plans as appropriate and submitting a revision to the City.
6. Contractor will be responsible for keeping roads and drives adjacent to and near the site free from soil, sediment, and debris. Contractor will not remove soil, sediment, or debris from any area or vehicle by means of water, only shoveling and sweeping will be allowed. Contractor will be responsible for dust control from the site.
7. Any existing utilities, pavement, curbs, sidewalks, structures, trees, etc., not planned for destruction or removal or other public infrastructure damaged or removed will be by the contractor at his expense before acceptance of the project.
8. After the construction permit has been issued and prior to the beginning construction, the owner or his representative shall schedule a pre-construction conference between the City of West Lake Hills, Design Engineer, Contractor(s), other utility companies, and any other affected parties. The City of West Lake Hills shall be contacted to set up the meeting at least 48 hours prior to the proposed meeting time.
9. Any changes or revisions to these approved plans must be submitted by the design engineer and approved by the City of West Lake Hills prior to construction of the revision.
10. Available benchmarks that may be utilized for the construction of this project are described as follows:

TRENCH SAFETY NOTES

1. In accordance with the Laws of the State of Texas and the U. S. Occupational Safety and Health Administration regulations, all trenches over 5 feet in depth in either hard and compact or soft and unstable soil shall be sloped, shored, sheeted, braced or otherwise supported. Furthermore, all trenches less than 5 feet in depth shall also be effectively protected when hazardous ground movement may be expected. Trench safety systems to be utilized for this project will be provided by the contractor.
2. In accordance with the U. S. Occupational Safety and Health Administration regulations, when persons are in trenches 4-feet deep or more, adequate means of exit, such as a ladder or steps, must be provided and located so as to require no more than 25 feet of lateral travel.
3. If trench safety system details were not provided in the plans because trenches were anticipated

to be less than 5 feet in depth and during construction it is found that trenches are in fact 5 feet or more in depth or trenches less than 5 feet in depth are in an area where hazardous ground movement is expected, all construction shall cease, the trenched area shall be barricaded and the Engineer notified immediately. Construction shall not resume until appropriate trench safety system details, as designed by a professional engineer, are retained and copies submitted to the City of West Lake Hills.

STREET AND DRAINAGE NOTES

1. All testing shall be done by an independent laboratory at the Applicant's expense. A City Inspector shall be present during all tests. Testing shall be coordinated with the City Inspector and he shall be given a minimum of 24-hour notice prior to any testing.
2. Backfill behind the curb shall be compacted to obtain a minimum of 85% maximum density to within 3 inches of the top of curb. Material used shall be primarily granular with no rocks larger than 3 inches in the greatest dimension. The remaining 3 inches shall be clean topsoil free from all clods and suitable for sustaining plant life.
3. All RCP shall be minimum Class III.
4. The subgrade material for the streets shown herein was tested by_____. The paving sections were designed by_____in accordance with the current City of West Lake Hills design criteria. The paving sections are to be constructed as follows:

Street	Station	Flex. Base Thickness	HMAC Thickness	Lime Stab. Thickness

5. Lots in this subdivision are located over the Edwards Aquifer Recharge Zone and subject to the current Texas Commission on Environmental Quality Edwards Rules. No building permit will be issued by the City of West Lake Hills until the requirements of the Edwards Rules are fully complied with. The applicant for a building permit is responsible for furnishing the City written compliance to the Edwards Aquifer Rules from the Texas Commission on Environmental Quality. (if applicable)
6. The FEMA maps for the City of West Lake Hills, Texas, indicate that the property shown hereon does/does not lie within a special flood hazard area as defined by FIRM Panel_____, dated _____."
7. FLOOD WARNING: The degree of flood protection required by the City of West Lake Hills Flood Damage Prevention Ordinance is considered reasonable for regulatory purposes and is based on scientific and engineering considerations. On rare occasions, greater floods can and will occur and flood heights may be increased by man-made or natural causes. Acceptance of this plan by the City Council does not imply that land outside the areas of special flood hazards or uses permitted within such areas will be free from flooding or flood damages. Nor shall acceptance of this plan create liability on the part of the City of West Lake Hills or any official or employee thereof for any flood damages that result from reliance on the information contained within this plan or any administration decision lawfully made hereunder.

TRAFFIC MARKING NOTES

1. Barricades built to the Texas Manual on Uniform Traffic Control Devices standards shall be constructed on all dead-end streets and as necessary during construction to maintain job and public safety.

2. Any methods, street markings, and signage necessary for warning motorists, warning pedestrians, or diverting traffic during construction shall conform to the Texas Manual of Uniform Traffic Control Devices for Streets and Highways, latest edition.
3. All pavement markings, markers, paint, traffic buttons, traffic controls, and signs shall be installed in accordance with the Texas Department of Transportation Standard Specifications for Construction of Highways, Streets and Bridges and the Texas Manual of Uniform Traffic Control Devices for Streets and Highways, latest editions.

EROSION CONTROL NOTES

1. Every lot in this subdivision is subject to the City of West Lake Hills' site clearance procedures. No site clearance, excavation, grading or landfill shall commence unless a permit shall have first been issued for such work in accordance with the provisions of applicable ordinances. Impervious cover shall not exceed the maximum percentage permitted under City Ordinance.
2. The contractor shall install erosion/sedimentation controls and tree/natural area protective fencing prior to any site preparation work (clearing, grubbing or excavation). The placement of erosion/sedimentation controls shall be in accordance with the current City West Lake Hills Drainage and Erosion Control Manual and the approved Erosion and Sedimentation Control Plan. No erosion controls shall be placed beyond the property lines of the site unless written permission has been obtained from adjacent property owners.
3. All slopes shall be sodded or seeded with approved grass, grass mixtures, or ground cover suitable to the area and season in which they are applied.
4. Any major variation in materials or locations of controls or fences from those shown on the approved plans will require a revision and must be approved by the Engineer. Major revisions must be approved by the City. Minor changes to be made as field revisions to the Erosion and Sedimentation Control Plan may be required by the City Inspector during the course of construction to correct control inadequacies.
5. The contractor is required to inspect the controls at weekly intervals and after any rainfall event to ensure that they are functioning properly. The person(s) responsible for maintenance of controls and fences shall immediately make any necessary repairs to damaged areas. Silt accumulation at controls must be removed when the depth reaches six (6) inches.
6. All temporary erosion control measures shall not be removed until final inspection and approval of the project by the City Inspector. It shall be the responsibility of the Contractor to maintain all temporary erosion control structures and to remove each structure as approved by the City Inspector.
7. Per TPDES requirements, disturbed areas on which construction activities have ceased (temporarily or permanently) shall be stabilized within 14 days unless activity resumes within 21 days. Seeding does not constitute as stabilization.
8. Stripping of vegetation from project sites shall be phased so as to expose the minimum amount of area to soil erosion for the shortest possible period of time per the Drainage and Erosion Control Design Manual Sec.7.1(l).
9. Prior to final acceptance by the City, haul roads and waterway crossings constructed for temporary contractor access must be removed, accumulated sediment removed from the waterway and the area restored to the original grade and revegetated. All land clearing debris shall be disposed of in approved spoil disposal sites.

OWNERS CERTIFICATION

AS OWNER OF THIS PROPERTY, I INTEND TO DEVELOP AND MAINTAIN THIS PROPERTY AS DESCRIBED BY THIS PLAN

NAME OF OWNER/TRUSTEE DATE

ENGINEERS CERTIFICATION

STATE OF TEXAS

COUNTY OF TRAVIS

I, (LICENSED PROFESSIONAL ENGINEER), DO HEREBY CERTIFY THAT THE PUBLIC WORKS AND DRAINAGE IMPROVEMENTS DESCRIBED HEREIN HAVE BEEN DESIGNED IN COMPLIANCE WITH THE CITY OF WEST LAKE HILLS CODE OF ORDINANCES, THE CITY MASTER PLAN AND CITY POLICY.

(SEAL & SIGNATURE OF PROFESSIONAL ENGINEER)

NAME OF PROFESSIONAL ENGINEER DATE

CITY ACCEPTANCE BLOCK

ALL RESPONSIBILITY FOR THE ADEQUACY OF THESE PLANS REMAINS WITH THE ENGINEER WHO PREPARED THEM. IN ACCEPTING THESE PLANS, THE CITY OF WEST LAKE HILLS MUST RELY UPON THE ADEQUACY OF THE WORK OF THE DESIGN ENGINEER.

ACCEPTED FOR CONSTRUCTION:

CITY ADMINISTRATOR DATE

CHECKLIST FOR TYPE II RESIDENTIAL DEVELOPMENT

Project Name/Address:_____**Permit Number:** _____

The following information shall be shown on the plans and/or submitted with the plans:

General Requirements

The following shall be shown on all plan view sheets, as applicable.

___1. North arrow, north to be at top of sheet if possible
___2. Legend with all acronyms defined
___3. Scale bar and numeric scale, in generally accepted engineering scale. Minimum scale 1"=50'
___4. Required front, side and rear setbacks as defined in the Ordinance Sec 22.03.281
___5. Survey information including planimetrics features and labels, as appropriate
___6. Name and location of existing and proposed easements, right-of-way, streets, pipelines, water courses, etc. within or abutting the lot where development
___7. Project boundaries
___8. The dimensions of any right-of-way, easement, or other part of the property intended to be dedicated to public use
___9. Post-development 100-year frequency event water surface elevation boundaries shall be shown and contained within an easement

Cover Sheet

___1. Project name, legal description, existing and proposed zoning, and type of plans included
___2. Location map with north arrow, scale, and location of jurisdictional boundaries
___3. The name, address and phone numbers of the Applicant, record owner, registered public surveyor, and licensed professional engineer (if applicable)
___4. A sheet index
___5. A revision block
___6. A list of utility providers and contact information
___7. The permit numbers of other entities or jurisdictions which have authority over the project
___8. A description of any variances and the date of which they were approved
___9. Owner's certification located on website
___10. Engineer's certification located on website
___11. Standard signature block for City acceptance located on website

Project Notes

___1. The West Lake Hills Standard Construction Notes located on the City website
___2. A sequence of construction
___3. Any other notes required by other regulatory agencies (e.g. TxDOT)

Existing conditions

___1. Surveyor's certification
___2. Survey control information including locations of all benchmarks, permanent monuments and control points
___3. Boundary survey with dimensions and bearings; boundary shown in solid bold lines
___4. Property lines, address, land use, and zoning of adjacent properties
___5. One-foot contours a minimum of 50 feet beyond all site boundaries
___6. On the ground survey of existing planimetrics including buildings, sidewalks, pavements, utilities, septic systems, drainage features, and other features not less than one year old

___7. Current and certified tree survey including tree table with size and species
___8. Location, type, acreage, and percentage of existing impervious cover per Drainage and Erosion Control Design Manual Section 2.1.6 impervious cover criteria.
___9. Total Site Area

SITE PLAN

___1. Location, type, acreage, and percentage of proposed impervious cover per Drainage and Erosion Control Design Manual Section 2.1.6 impervious cover criteria.
___2. Driveway spacing from centerline to centerline of all adjacent and opposing driveways
___3. Fire lanes and fire striping notes or details
___4. Fire lanes and fire striping notes or details
___5. Required parking calculations/ parking layout with dimensions per Ordinance Sec. 22.03.242
___6. Location of screening with dimensions and materials proposed
___7. Dumpster location(s) and screening

GRADING PLAN

___1. Existing and proposed topographic contours
___2. Locations of all proposed cut and fill or other structure elevating techniques, levees, channel modifications and detention facilities.
___3. Proposed swales and typical cross sections
___4. Finished floor elevations and spot grades as necessary to demonstrate grading
___5. Flow arrows

EROSION AND SEDIMENTATION CONTROL PLAN

___1. Existing and proposed topographic conditions
___2. Existing and proposed street, utility, and drainage facilities
___3. Location / limits of construction/disturbed area.
___4. Contractor staging areas, vehicle access areas, temporary and permanent spoil storage areas
___5. The location, size, and character of all temporary and permanent erosion and sediment control facilities with appropriate erosion details
___6. A plan for restoration for the mitigation of erosion in all areas disturbed during construction
___7. Maximum cut/fill limits per Drainage and Erosion Control Design Manual Section 9.4.1 criteria.

DRAINAGE IMPROVEMENTS

___1. Drainage and Water Quality Report shall be prepared, signed and sealed by a professional engineer licensed in the State of Texas, experienced in civil engineering per Drainage and Erosion Control Design Manual Section 2.1.3.1 criteria.
___2. Existing and proposed drainage area boundaries showing watershed delineations, existing and proposed topographic contours, and existing and proposed drainage infrastructure
___3. Drainage impact assessment per Drainage and Erosion Control Design Manual Sec. 2.4 showing points of concentration used for analysis for the 5-, 25, and 100-year storm events
___4. Plan view of all storm sewers including size, pipe material, length, and elevation of all drainage facilities
___5. Appropriate drainage details

Channel / Detention Pond Plan and Details

___1. Plan view of all facilities including geometry, side slopes, and inlet and outlet points per the Drainage and Erosion Control Design Manual Sec. 4.5.1
___2. Profiles of all proposed channels including existing and proposed finished grade, hydraulic grade lines, velocity calculations, capacity, flow line elevations, and slopes per the Drainage and Erosion Control Design Manual Sec. 4.5.3
___3. Cross sections for proposed facilities showing channel geometry, side slopes, and 100-year water surface elevations

Water Quality

___1. Edwards Aquifer Zone Designation (Contributing or Recharge). Development and redevelopment located over the Edwards Aquifer Regulatory Zones shall comply with the latest TCEQ published rules and technical design guidance for the Edwards Aquifer in accordance with 30 TAC Chapter 213 (Edwards Aquifer Rules).
___2. All single-family residential developments with impervious cover above 20% must provide water quality treatment for both the Recharge and Contributing Zones. Must include two impervious cover tables: one addressing Building Rules/Drainage Mitigation and a second for water quality determination.

Utility Layouts

___1. The plan shall indicate the availability of existing water and wastewater infrastructure necessary to serve all structures and uses including septic systems per Ordinance Chapter 18.
___2. The size, pipe material and classification, and location (vertical and horizontal) with respect to easements, rights-of way, and property lines of the existing and proposed service line, appurtenances, and other related structures sufficient to serve the proposed land uses and development shall be identified

Electric and Lighting Plan

___1. Exterior lighting including service to all structures, location of existing and proposed transformers and lighting fixtures per Ordinance Sec. 24.03.003
___2. Lighting fixture detail cut sheets and detail of light poles
___3. Lighting fixture lumen schedule and calculation table.

Building Foundation Height

___1. Building elevations showing any architectural features and indicating the height of the proposed structure and foundation height per Ordinance Sec. 22.03.281

Landscape Plan

___1. The location, size, and species of all trees to be preserved or removed and location of replacement trees
___2. The location, size, species, and spacing of all plant and screening materials to be used
___3. Layout and description of irrigation, sprinkler, or water systems including placement of water sources.
___4. Description of maintenance provision
___5. Intersection sight distance visibility triangles shown on the plan
___6. Landscaping area and tree mitigation

I hereby confirm that this application is complete and all required information is attached. I further agree to comply with all platting and subdivision design requirements of the City of West Lake Hills. I understand that the permit will not be issued unless staff comments are satisfactorily addressed.

_____ _____

Signature of Owner/Applicant Date

_____

Print Name & Title

GENERAL NOTES

1. All materials and construction methods for site grading, paving, sitework, and drainage shall be in accordance with the current City of Austin Standard Specifications, unless otherwise noted. All work shall be in accordance with the building codes, ordinances, safety codes, and rules and procedures of the City of West Lake Hills.
2. All responsibility for the adequacy of these plans remains with the Engineer who prepared them. In reviewing these plans, the City of West Lake Hills must rely on the adequacy of the work of the design engineer.
3. Prior to any construction, the Contractor shall apply for and secure all proper permits from the appropriate authorities.
4. Blasting or burning shall not be permitted on this project.
5. The contractor shall verify all depths and locations of existing utilities prior to beginning construction. Any discrepancies with the construction plans found in the field shall be brought to the attention of the design engineer immediately. The design engineer shall be responsible for revising the plans as appropriate and submitting a revision to the City.
6. Contractor will be responsible for keeping roads and drives adjacent to and near the site free from soil, sediment, and debris. Contractor will not remove soil, sediment, or debris from any area or vehicle by means of water, only shoveling and sweeping will be allowed. Contractor will be responsible for dust control from the site.
7. Any existing utilities, pavement, curbs, sidewalks, structures, trees, etc., not planned for destruction or removal or other public infrastructure damaged or removed will be by the contractor at his expense before acceptance of the project.
8. After the construction permit has been issued and prior to the beginning construction, the owner or his representative shall schedule a pre-construction conference between the City of West Lake Hills, Design Engineer, Contractor(s), other utility companies, and any other affected parties. The City of West Lake Hills shall be contacted to set up the meeting at least 48 hours prior to the proposed meeting time.
9. Any changes or revisions to these approved plans must be submitted by the design engineer and approved by the City of West Lake Hills prior to construction of the revision.
10. Available benchmarks that may be utilized for the construction of this project are described as follows:

TRENCH SAFETY NOTES

1. In accordance with the Laws of the State of Texas and the U. S. Occupational Safety and Health Administration regulations, all trenches over 5 feet in depth in either hard and compact or soft and unstable soil shall be sloped, shored, sheeted, braced or otherwise supported. Furthermore, all trenches less than 5 feet in depth shall also be effectively protected when hazardous ground movement may be expected. Trench safety systems to be utilized for this project will be provided by the contractor.
2. In accordance with the U. S. Occupational Safety and Health Administration regulations, when persons are in trenches 4-feet deep or more, adequate means of exit, such as a ladder or steps, must be provided and located so as to require no more than 25 feet of lateral travel.
3. If trench safety system details were not provided in the plans because trenches were anticipated

to be less than 5 feet in depth and during construction it is found that trenches are in fact 5 feet or more in depth or trenches less than 5 feet in depth are in an area where hazardous ground movement is expected, all construction shall cease, the trenched area shall be barricaded and the Engineer notified immediately. Construction shall not resume until appropriate trench safety system details, as designed by a professional engineer, are retained and copies submitted to the City of West Lake Hills.

STREET AND DRAINAGE NOTES

1. All testing shall be done by an independent laboratory at the Applicant's expense. A City Inspector shall be present during all tests. Testing shall be coordinated with the City Inspector and he shall be given a minimum of 24-hour notice prior to any testing.
2. Backfill behind the curb shall be compacted to obtain a minimum of 85% maximum density to within 3 inches of the top of curb. Material used shall be primarily granular with no rocks larger than 3 inches in the greatest dimension. The remaining 3 inches shall be clean topsoil free from all clods and suitable for sustaining plant life.
3. All RCP shall be minimum Class III.
4. The subgrade material for the streets shown herein was tested by_____. The paving sections were designed by_____in accordance with the current City of West Lake Hills design criteria. The paving sections are to be constructed as follows:

Street	Station	Flex. Base Thickness	HMAC Thickness	Lime Stab. Thickness

5. Lots in this subdivision are located over the Edwards Aquifer Recharge Zone and subject to the current Texas Commission on Environmental Quality Edwards Rules. No building permit will be issued by the City of West Lake Hills until the requirements of the Edwards Rules are fully complied with. The applicant for a building permit is responsible for furnishing the City written compliance to the Edwards Aquifer Rules from the Texas Commission on Environmental Quality. (if applicable)
6. The FEMA maps for the City of West Lake Hills, Texas, indicate that the property shown hereon does/does not lie within a special flood hazard area as defined by FIRM Panel_____, dated _____."
7. FLOOD WARNING: The degree of flood protection required by the City of West Lake Hills Flood Damage Prevention Ordinance is considered reasonable for regulatory purposes and is based on scientific and engineering considerations. On rare occasions, greater floods can and will occur and flood heights may be increased by man-made or natural causes. Acceptance of this plan by the City Council does not imply that land outside the areas of special flood hazards or uses permitted within such areas will be free from flooding or flood damages. Nor shall acceptance of this plan create liability on the part of the City of West Lake Hills or any official or employee thereof for any flood damages that result from reliance on the information contained within this plan or any administration decision lawfully made hereunder.

TRAFFIC MARKING NOTES

1. Barricades built to the Texas Manual on Uniform Traffic Control Devices standards shall be constructed on all dead-end streets and as necessary during construction to maintain job and public safety.

2. Any methods, street markings, and signage necessary for warning motorists, warning pedestrians, or diverting traffic during construction shall conform to the Texas Manual of Uniform Traffic Control Devices for Streets and Highways, latest edition.
3. All pavement markings, markers, paint, traffic buttons, traffic controls, and signs shall be installed in accordance with the Texas Department of Transportation Standard Specifications for Construction of Highways, Streets and Bridges and the Texas Manual of Uniform Traffic Control Devices for Streets and Highways, latest editions.

EROSION CONTROL NOTES

1. Every lot in this subdivision is subject to the City of West Lake Hills' site clearance procedures. No site clearance, excavation, grading or landfill shall commence unless a permit shall have first been issued for such work in accordance with the provisions of applicable ordinances. Impervious cover shall not exceed the maximum percentage permitted under City Ordinance.
2. The contractor shall install erosion/sedimentation controls and tree/natural area protective fencing prior to any site preparation work (clearing, grubbing or excavation). The placement of erosion/sedimentation controls shall be in accordance with the current City West Lake Hills Drainage and Erosion Control Manual and the approved Erosion and Sedimentation Control Plan. No erosion controls shall be placed beyond the property lines of the site unless written permission has been obtained from adjacent property owners.
3. All slopes shall be sodded or seeded with approved grass, grass mixtures, or ground cover suitable to the area and season in which they are applied.
4. Any major variation in materials or locations of controls or fences from those shown on the approved plans will require a revision and must be approved by the Engineer. Major revisions must be approved by the City. Minor changes to be made as field revisions to the Erosion and Sedimentation Control Plan may be required by the City Inspector during the course of construction to correct control inadequacies.
5. The contractor is required to inspect the controls at weekly intervals and after any rainfall event to ensure that they are functioning properly. The person(s) responsible for maintenance of controls and fences shall immediately make any necessary repairs to damaged areas. Silt accumulation at controls must be removed when the depth reaches six (6) inches.
6. All temporary erosion control measures shall not be removed until final inspection and approval of the project by the City Inspector. It shall be the responsibility of the Contractor to maintain all temporary erosion control structures and to remove each structure as approved by the City Inspector.
7. Per TPDES requirements, disturbed areas on which construction activities have ceased (temporarily or permanently) shall be stabilized within 14 days unless activity resumes within 21 days. Seeding does not constitute as stabilization.
8. Stripping of vegetation from project sites shall be phased so as to expose the minimum amount of area to soil erosion for the shortest possible period of time per the Drainage and Erosion Control Design Manual Sec.7.1(l).
9. Prior to final acceptance by the City, haul roads and waterway crossings constructed for temporary contractor access must be removed, accumulated sediment removed from the waterway and the area restored to the original grade and revegetated. All land clearing debris shall be disposed of in approved spoil disposal sites.

OWNERS CERTIFICATION

AS OWNER OF THIS PROPERTY, I INTEND TO DEVELOP AND MAINTAIN THIS PROPERTY AS DESCRIBED BY THIS PLAN

NAME OF OWNER/TRUSTEE DATE

ENGINEERS CERTIFICATION

STATE OF TEXAS

COUNTY OF TRAVIS

I, (LICENSED PROFESSIONAL ENGINEER), DO HEREBY CERTIFY THAT THE PUBLIC WORKS AND DRAINAGE IMPROVEMENTS DESCRIBED HEREIN HAVE BEEN DESIGNED IN COMPLIANCE WITH THE CITY OF WEST LAKE HILLS CODE OF ORDINANCES, THE CITY MASTER PLAN AND CITY POLICY.

(SEAL & SIGNATURE OF PROFESSIONAL ENGINEER)

NAME OF PROFESSIONAL ENGINEER DATE

CITY ACCEPTANCE BLOCK

ALL RESPONSIBILITY FOR THE ADEQUACY OF THESE PLANS REMAINS WITH THE ENGINEER WHO PREPARED THEM. IN ACCEPTING THESE PLANS, THE CITY OF WEST LAKE HILLS MUST RELY UPON THE ADEQUACY OF THE WORK OF THE DESIGN ENGINEER.

ACCEPTED FOR CONSTRUCTION:

CITY ADMINISTRATOR DATE

CHECKLIST FOR TYPE II NON-RESIDENTIAL DEVELOPMENT

Project Name/Address:_____**Permit Number:** _____

The following information shall be shown on the plans and/or submitted with the plans:

General Requirements

The following shall be shown on all plan view sheets, as applicable.

___1. North arrow, north to be at top of sheet if possible
___2. Legend with all acronyms defined
___3. Scale bar and numeric scale, in generally accepted engineering scale. Minimum scale 1"=50'
___4. Required front, side and rear setbacks as defined in the Ordinance Sec 22.03.281
___5. Survey information including planimetrics features and labels, as appropriate
___6. Name and location of existing and proposed easements, right-of-way, streets, pipelines, water courses, etc. within or abutting the lot where development
___7. Project boundaries
___8. The dimensions of any right-of-way, easement, or other part of the property intended to be dedicated to public use
___9. Post-development 100-year frequency event water surface elevation boundaries shall be shown and contained within an easement

Cover Sheet

___1. Project name, legal description, existing and proposed zoning, and type of plans included
___2. Location map with north arrow, scale, and location of jurisdictional boundaries
___3. The name, address and phone numbers of the Applicant, record owner, registered public surveyor, and licensed professional engineer (if applicable)
___4. A sheet index
___5. A revision block
___6. A list of utility providers and contact information
___7. The permit numbers of other entities or jurisdictions which have authority over the project
___8. A description of any variances and the date of which they were approved
___9. Owner's certification located on website
___10. Engineer's certification located on website
___11. Standard signature block for City acceptance located on website

Project Notes

___1. The West Lake Hills Standard Construction Notes located on the City website
___2. A sequence of construction
___3. Any other notes required by other regulatory agencies (e.g. TxDOT)

Existing Conditions

___1. Surveyor's certification
___2. Survey control information including locations of all benchmarks, permanent monuments and control points
___3. Boundary survey with dimensions and bearings; boundary shown in solid bold lines
___4. Property lines, address, land use, and zoning of adjacent properties
___5. One-foot contours a minimum of 50 feet beyond all site boundaries

___6. On the ground survey of existing planimetrics including buildings, sidewalks, pavements, utilities, septic systems, drainage features, and other features not less than one year old
___7. Current and certified tree survey including tree table with size and species
___8. Location, type, acreage, and percentage of existing impervious cover per Drainage and Erosion Control Design Manual Section 2.1.6 impervious cover criteria.
___9. Total Site Area

SITE PLAN

___1. Location, type, acreage, and percentage of proposed impervious cover per Drainage and Erosion Control Design Manual Section 2.1.6 impervious cover criteria.
___2. Driveway spacing from centerline to centerline of all adjacent and opposing driveways
___3. Fire lanes and fire striping notes or details
___4. Fire lanes and fire striping notes or details
___5. Required parking calculations and parking layout with dimensions per Ordinance Sec. 22.03.242
___6. Location of screening with dimensions and materials proposed
___7. Dumpster location(s) and screening

GRADING PLAN

___1. Existing and proposed topographic contours
___2. Locations of all proposed cut and fill or other structure elevating techniques, levees, channel modifications and detention facilities
___3. Proposed swales and typical cross sections
___4. Finished floor elevations and spot grades as necessary to demonstrate grading
___5. Flow arrows

EROSION AND SEDIMENTATION CONTROL PLAN

___1. Existing and proposed topographic conditions
___2. Existing and proposed street, utility, and drainage facilities
___3. Location / limits of construction/disturbed area
___4. Contractor staging areas, vehicle access areas, temporary and permanent spoil storage areas
___5. The location, size, and character of all temporary and permanent erosion and sediment control facilities with appropriate erosion details
___6. A plan for restoration for the mitigation of erosion in all areas disturbed during construction
___7. Maximum cut/fill limits per Drainage and Erosion Control Design Manual Section 9.4.1 criteria.

DRAINAGE IMPROVEMENTS

___1. Drainage Report shall be prepared, signed and sealed by a professional engineer licensed in the State of Texas, experienced in civil engineering, and having a thorough knowledge of hydraulic analysis and design per Drainage and Erosion Control Manual 2.1.4.1 criteria.
___2. Existing and proposed drainage area boundaries showing watershed delineations, existing and proposed topographic contours, and existing and proposed drainage infrastructure
___3. Drainage impact assessment per Drainage and Erosion Control Design Manual Sec. 2.4 showing points of concentration used for analysis for the 5-, 25, and 100-year storm events
___4. Plan view of all storm sewers including size, pipe material, length, and elevation of all drainage facilities

___5. Appropriate drainage details

Channel / Detention Pond Plan and Details

___1. Plan view of all facilities including geometry, side slopes, and inlet and outlet points per the Drainage and Erosion Control Design Manual Sec. 4.5.1

___2. Profiles of all proposed channels including existing and proposed finished grade, hydraulic grade lines, velocity calculations, capacity, flow line elevations, and slopes per the Drainage and Erosion Control Design Manual Sec. 4.5.3

___3. Cross sections for proposed facilities showing channel geometry, side slopes, and 100-year water surface elevations

Water Quality

___1. Edwards Aquifer Zone Designation (Contributing or Recharge). Development and redevelopment located over the Edwards Aquifer Regulatory Zones shall comply with the latest TCEQ published rules and technical design guidance for the Edwards Aquifer in accordance with 30 TAC Chapter 213 (Edwards Aquifer Rules).

Utility Layouts

___1. The plan shall indicate the availability of existing water and wastewater infrastructure necessary to serve all structures and uses including septic systems per Ordinance Chapter 18.

___2. The size, pipe material and classification, and location (vertical and horizontal) with respect to easements, rights-of way, and property lines of the existing and proposed service line, appurtenances, and other related structures sufficient to serve the proposed land uses and development shall be identified

Electric and Lighting Plan

___1. Exterior lighting including service to all structures, location of existing and proposed transformers and lighting fixtures per Ordinance Sec. 24.03.003

___2. Lighting fixture detail cut sheets and detail of light poles

___3. Lighting fixture lumen schedule and calculation table.

Building Foundation Height

___1. Building elevations showing any architectural features and indicating the height of the proposed structure and foundation height per Ordinance Sec. 22.03.281

Landscape Plan

___1. The location, size, and species of all trees to be preserved or removed and location of replacement trees

___2. The location, size, species, and spacing of all plant and screening materials to be used

___3. Layout and description of irrigation, sprinkler, or water systems including placement of water sources.

___4. Description of maintenance provision

___5. Intersection sight distance visibility triangles shown on the plan

___6. Landscaping area and tree mitigation

I hereby confirm that this application is complete and all required information is attached. I further agree to comply with all platting and subdivision design requirements of the City of West Lake Hills. I understand that the permit will not be issued unless staff comments are satisfactorily addressed.

_____ _____

Signature of Owner/Applicant Date

_____

Print Name & Title

GENERAL NOTES

1. All materials and construction methods for site grading, paving, sitework, and drainage shall be in accordance with the current City of Austin Standard Specifications, unless otherwise noted. All work shall be in accordance with the building codes, ordinances, safety codes, and rules and procedures of the City of West Lake Hills.
2. All responsibility for the adequacy of these plans remains with the Engineer who prepared them. In reviewing these plans, the City of West Lake Hills must rely on the adequacy of the work of the design engineer.
3. Prior to any construction, the Contractor shall apply for and secure all proper permits from the appropriate authorities.
4. Blasting or burning shall not be permitted on this project.
5. The contractor shall verify all depths and locations of existing utilities prior to beginning construction. Any discrepancies with the construction plans found in the field shall be brought to the attention of the design engineer immediately. The design engineer shall be responsible for revising the plans as appropriate and submitting a revision to the City.
6. Contractor will be responsible for keeping roads and drives adjacent to and near the site free from soil, sediment, and debris. Contractor will not remove soil, sediment, or debris from any area or vehicle by means of water, only shoveling and sweeping will be allowed. Contractor will be responsible for dust control from the site.
7. Any existing utilities, pavement, curbs, sidewalks, structures, trees, etc., not planned for destruction or removal or other public infrastructure damaged or removed will be by the contractor at his expense before acceptance of the project.
8. After the construction permit has been issued and prior to the beginning construction, the owner or his representative shall schedule a pre-construction conference between the City of West Lake Hills, Design Engineer, Contractor(s), other utility companies, and any other affected parties. The City of West Lake Hills shall be contacted to set up the meeting at least 48 hours prior to the proposed meeting time.
9. Any changes or revisions to these approved plans must be submitted by the design engineer and approved by the City of West Lake Hills prior to construction of the revision.
10. Available benchmarks that may be utilized for the construction of this project are described as follows:

TRENCH SAFETY NOTES

1. In accordance with the Laws of the State of Texas and the U. S. Occupational Safety and Health Administration regulations, all trenches over 5 feet in depth in either hard and compact or soft and unstable soil shall be sloped, shored, sheeted, braced or otherwise supported. Furthermore, all trenches less than 5 feet in depth shall also be effectively protected when hazardous ground movement may be expected. Trench safety systems to be utilized for this project will be provided by the contractor.
2. In accordance with the U. S. Occupational Safety and Health Administration regulations, when persons are in trenches 4-feet deep or more, adequate means of exit, such as a ladder or steps, must be provided and located so as to require no more than 25 feet of lateral travel.
3. If trench safety system details were not provided in the plans because trenches were anticipated

to be less than 5 feet in depth and during construction it is found that trenches are in fact 5 feet or more in depth or trenches less than 5 feet in depth are in an area where hazardous ground movement is expected, all construction shall cease, the trenched area shall be barricaded and the Engineer notified immediately. Construction shall not resume until appropriate trench safety system details, as designed by a professional engineer, are retained and copies submitted to the City of West Lake Hills.

STREET AND DRAINAGE NOTES

1. All testing shall be done by an independent laboratory at the Applicant's expense. A City Inspector shall be present during all tests. Testing shall be coordinated with the City Inspector and he shall be given a minimum of 24-hour notice prior to any testing.
2. Backfill behind the curb shall be compacted to obtain a minimum of 85% maximum density to within 3 inches of the top of curb. Material used shall be primarily granular with no rocks larger than 3 inches in the greatest dimension. The remaining 3 inches shall be clean topsoil free from all clods and suitable for sustaining plant life.
3. All RCP shall be minimum Class III.
4. The subgrade material for the streets shown herein was tested by_____. The paving sections were designed by_____in accordance with the current City of West Lake Hills design criteria. The paving sections are to be constructed as follows:

Street	Station	Flex. Base Thickness	HMAC Thickness	Lime Stab. Thickness

5. Lots in this subdivision are located over the Edwards Aquifer Recharge Zone and subject to the current Texas Commission on Environmental Quality Edwards Rules. No building permit will be issued by the City of West Lake Hills until the requirements of the Edwards Rules are fully complied with. The applicant for a building permit is responsible for furnishing the City written compliance to the Edwards Aquifer Rules from the Texas Commission on Environmental Quality. (if applicable)
6. The FEMA maps for the City of West Lake Hills, Texas, indicate that the property shown hereon does/does not lie within a special flood hazard area as defined by FIRM Panel_____, dated _____."
7. FLOOD WARNING: The degree of flood protection required by the City of West Lake Hills Flood Damage Prevention Ordinance is considered reasonable for regulatory purposes and is based on scientific and engineering considerations. On rare occasions, greater floods can and will occur and flood heights may be increased by man-made or natural causes. Acceptance of this plan by the City Council does not imply that land outside the areas of special flood hazards or uses permitted within such areas will be free from flooding or flood damages. Nor shall acceptance of this plan create liability on the part of the City of West Lake Hills or any official or employee thereof for any flood damages that result from reliance on the information contained within this plan or any administration decision lawfully made hereunder.

TRAFFIC MARKING NOTES

1. Barricades built to the Texas Manual on Uniform Traffic Control Devices standards shall be constructed on all dead-end streets and as necessary during construction to maintain job and public safety.

2. Any methods, street markings, and signage necessary for warning motorists, warning pedestrians, or diverting traffic during construction shall conform to the Texas Manual of Uniform Traffic Control Devices for Streets and Highways, latest edition.
3. All pavement markings, markers, paint, traffic buttons, traffic controls, and signs shall be installed in accordance with the Texas Department of Transportation Standard Specifications for Construction of Highways, Streets and Bridges and the Texas Manual of Uniform Traffic Control Devices for Streets and Highways, latest editions.

EROSION CONTROL NOTES

1. Every lot in this subdivision is subject to the City of West Lake Hills' site clearance procedures. No site clearance, excavation, grading or landfill shall commence unless a permit shall have first been issued for such work in accordance with the provisions of applicable ordinances. Impervious cover shall not exceed the maximum percentage permitted under City Ordinance.
2. The contractor shall install erosion/sedimentation controls and tree/natural area protective fencing prior to any site preparation work (clearing, grubbing or excavation). The placement of erosion/sedimentation controls shall be in accordance with the current City West Lake Hills Drainage and Erosion Control Manual and the approved Erosion and Sedimentation Control Plan. No erosion controls shall be placed beyond the property lines of the site unless written permission has been obtained from adjacent property owners.
3. All slopes shall be sodded or seeded with approved grass, grass mixtures, or ground cover suitable to the area and season in which they are applied.
4. Any major variation in materials or locations of controls or fences from those shown on the approved plans will require a revision and must be approved by the Engineer. Major revisions must be approved by the City. Minor changes to be made as field revisions to the Erosion and Sedimentation Control Plan may be required by the City Inspector during the course of construction to correct control inadequacies.
5. The contractor is required to inspect the controls at weekly intervals and after any rainfall event to ensure that they are functioning properly. The person(s) responsible for maintenance of controls and fences shall immediately make any necessary repairs to damaged areas. Silt accumulation at controls must be removed when the depth reaches six (6) inches.
6. All temporary erosion control measures shall not be removed until final inspection and approval of the project by the City Inspector. It shall be the responsibility of the Contractor to maintain all temporary erosion control structures and to remove each structure as approved by the City Inspector.
7. Per TPDES requirements, disturbed areas on which construction activities have ceased (temporarily or permanently) shall be stabilized within 14 days unless activity resumes within 21 days. Seeding does not constitute as stabilization.
8. Stripping of vegetation from project sites shall be phased so as to expose the minimum amount of area to soil erosion for the shortest possible period of time per the Drainage and Erosion Control Design Manual Sec.7.1(l).
9. Prior to final acceptance by the City, haul roads and waterway crossings constructed for temporary contractor access must be removed, accumulated sediment removed from the waterway and the area restored to the original grade and revegetated. All land clearing debris shall be disposed of in approved spoil disposal sites.

OWNERS CERTIFICATION

AS OWNER OF THIS PROPERTY, I INTEND TO DEVELOP AND MAINTAIN THIS PROPERTY AS DESCRIBED BY THIS PLAN

NAME OF OWNER/TRUSTEE DATE

ENGINEERS CERTIFICATION

STATE OF TEXAS

COUNTY OF TRAVIS

I, (LICENSED PROFESSIONAL ENGINEER), DO HEREBY CERTIFY THAT THE PUBLIC WORKS AND DRAINAGE IMPROVEMENTS DESCRIBED HEREIN HAVE BEEN DESIGNED IN COMPLIANCE WITH THE CITY OF WEST LAKE HILLS CODE OF ORDINANCES, THE CITY MASTER PLAN AND CITY POLICY.

(SEAL & SIGNATURE OF PROFESSIONAL ENGINEER)

NAME OF PROFESSIONAL ENGINEER DATE

CITY ACCEPTANCE BLOCK

ALL RESPONSIBILITY FOR THE ADEQUACY OF THESE PLANS REMAINS WITH THE ENGINEER WHO PREPARED THEM. IN ACCEPTING THESE PLANS, THE CITY OF WEST LAKE HILLS MUST RELY UPON THE ADEQUACY OF THE WORK OF THE DESIGN ENGINEER.

ACCEPTED FOR CONSTRUCTION:

CITY ADMINISTRATOR DATE

CHECKLIST FOR TYPE III NON-RESIDENTIAL DEVELOPMENT

Project Name/Address:_____ **Permit Number:** _____

The following information shall be shown on the plans and/or submitted with the plans:

General Requirements

The following shall be shown on all plan view sheets, as applicable.

___1. North arrow, north to be at top of sheet if possible
___2. Legend with all acronyms defined
___3. Scale bar and numeric scale, in generally accepted engineering scale. Minimum scale 1"=50'
___4. Required front, side and rear setbacks as defined in the Ordinance Sec 22.03.281
___5. Survey information including planimetrics features and labels, as appropriate
___6. Name and location of existing and proposed easements, right-of-way, streets, pipelines, water courses, etc. within or abutting the lot where development
___7. Project boundaries
___8. The dimensions of any right-of-way, easement, or other part of the property intended to be dedicated to public use
___9. Existing, proposed, and future improvements.
___10. Post-development 100-year frequency event water surface elevation boundaries shall be shown and contained within an easement

Cover Sheet

___1. Project name, legal description, existing and proposed zoning, and type of plans included
___2. Location map with north arrow, scale, and location of jurisdictional boundaries
___3. The name, address and phone numbers of the Applicant, record owner, registered public surveyor, and licensed professional engineer
___4. A sheet index
___5. A revision block
___6. A list of utility providers and contact information
___7. The permit numbers of other entities or jurisdictions which have authority over the project
___8. A description of any variances and the date of which they were approved
___9. Owner's certification located on website
___10. Engineer's certification located on website
___11. Standard signature block for City acceptance located on website

Project Notes

___1. The West Lake Hills Standard Construction Notes located on the City website
___2. A sequence of construction
___3. Any other notes required by other regulatory agencies (e.g. TxDOT)

Existing conditions

___1. Surveyor's certification
___2. Survey control information including locations of all benchmarks, permanent monuments and control points
___3. Boundary survey with dimensions and bearings; boundary shown in solid bold lines
___4. Property lines, address, land use, and zoning of adjacent properties
___5. One-foot contours a minimum of 50 feet beyond all site boundaries

___6. On the ground survey of existing planimetrics including buildings, sidewalks, pavements, utilities, septic systems, drainage features, and other features not less than one year old
___7. Current and certified tree survey including tree table with size and species
___8. Location, type, acreage, and percentage of existing impervious cover per Drainage and Erosion Control Design Manual Section 2.1.6 impervious cover criteria.
___9. Total Site Area

SITE PLAN

___1. Location, type, acreage, and percentage of proposed impervious cover per Drainage and Erosion Control Design Manual Section 2.1.6 impervious cover criteria.
___2. Driveway spacing from centerline to centerline of all adjacent and opposing driveways
___3. Fire lanes and fire striping notes or details
___4. Required parking calculations and parking layout with dimensions per Ordinance Sec. 22.03.242
___5. Location of screening with dimensions and materials proposed
___6. Dumpster location(s) and screening

STREET PLAN AND PROFILES

___1. Attendant documents containing additional information required to evaluate the proposed roadway improvements, including geotechnical information and traffic impact studies
___2. Horizontal layouts and alignments showing geometric data and other pertinent design details.
___3. Direction of storm water flow and the location of existing and proposed drainage facilities
___4. Vertical layouts and alignments showing existing and proposed center line, right and left right-of-way line elevations. The vertical layout shall show the location of drainage facilities
___5. Typical paving sections showing right-of-way width, lane widths, median widths, shoulder widths, and pavement recommendations
___6. Location and dimensions of all sidewalks including location of pedestrian ramps
___7. Location, type, and size of all proposed street signs and markings in accordance with TxMUTCD including end of street markings
___8. Identify all areas of proposed cut and fill, including bridges, and provide details
___9. Appropriate roadway details

GRADING PLAN

___1. Existing and proposed topographic contours
___2. Locations of all proposed cut and fill or other structure elevating techniques, levees, channel modifications and detention facilities
___3. Proposed swales and typical cross sections
___4. Finished floor elevations and spot grades as necessary to demonstrate grading
___5. Flow arrows
___6. Fill specifications

EROSION AND SEDIMENTATION CONTROL PLAN

___1. Proposed fill, retaining walls, levees, channel modifications and detention facilities
___2. Existing and proposed topographic conditions
___3. Existing and proposed street, utility, and drainage facilities
___4. Location / limits of construction/disturbed area

___5. Contractor staging areas, vehicle access areas, temporary and permanent spoil storage areas
___6. The location, size, and character of all temporary and permanent erosion and sediment control facilities with appropriate erosion details
___7. A plan for restoration for the mitigation of erosion in all areas disturbed during construction
___8. Maximum cut/fill limits per Drainage and Erosion Control Design Manual Section 9.4.1 criteria.

Drainage Improvements

___1. Drainage and Water Quality Report shall be prepared, signed and sealed by a professional engineer licensed in the State of Texas, experienced in civil engineering, and having a thorough knowledge of hydraulic analysis and design per Drainage and Erosion Control Design Manual Section 2.1.5.1 criteria.
___2. Existing and proposed drainage area boundaries showing watershed delineations, existing and proposed topographic contours, and existing and proposed drainage infrastructure
___3. Drainage impact assessment per Drainage and Erosion Control Design Manual Sec. 2.4 showing points of concentration used for analysis for the 5, 25, and 100-year storm events
___4. Plan view of all storm sewers including size, pipe material, length, and elevation of all drainage facilities
___5. Vertical layouts and alignments showing existing and proposed ground profile, inlet locations with top elevations, pipe grades and elevations, and utility crossings. The layouts shall show the line designation, design flows, velocity, and the hydraulic grade lines for the 25-year and 100-year storm events
___6. Appropriate drainage details

Channel / Detention Pond Plan and Details

___1. Plan view of all facilities including geometry, side slopes, and inlet and outlet points per the Drainage and Erosion Control Design Manual Sec. 4.5.1
___2. Profiles of all proposed channels including existing and proposed finished grade, hydraulic grade lines, velocity calculations, capacity, flow line elevations, and slopes per the Drainage and Erosion Control Design Manual Sec. 4.5.3
___3. Cross sections for proposed facilities showing channel geometry, side slopes, and 100-year water surface elevations
___4. Design data sufficient to verify compliance the Drainage and Erosion Control Design Manual Chapter 5 including stage-storage-discharge table, size, total capacity, velocity, water surface elevation, and freeboard

Water Quality

___1. Edwards Aquifer Zone Designation (Contributing or Recharge). Development and redevelopment located over the Edwards Aquifer Regulatory Zones shall comply with the latest TCEQ published rules and technical design guidance for the Edwards Aquifer in accordance with 30 TAC Chapter 213 (Edwards Aquifer Rules).

CHECKLIST FOR TYPE III NON-RESIDENTIAL DEVELOPMENT

UTILITY LAYOUTS

___1. The plan shall indicate the availability of existing water and wastewater infrastructure necessary to serve all structures and uses including septic systems per Ordinance Chapter 18.
___2. The size, pipe material and classification, and location (vertical and horizontal) with respect to easements, rights-of way, and property lines of the existing and proposed service line, appurtenances, and other related structures sufficient to serve the proposed land uses and development shall be identified
___3. Details of appurtenances and connection with the existing City wastewater system

ELECTRIC AND LIGHTING PLAN

___1. Exterior lighting including service to all structures, location of existing and proposed transformers and lighting fixtures per Ordinance Sec. Sec 24.03.003
___2. Lighting fixture detail cut sheets and detail of light poles
___3. Lighting fixture lumen schedule and calculation table.

BUILDING ELEVATIONS

___1. Building elevations showing any architectural features and indicating the height of the proposed structure per Ordinance Sec. 22.03.281

LANDSCAPE PLAN

___1. The location, size, and species of all trees to be preserved or removed and location of replacement trees
___2. The location, size, species, and spacing of all plant and screening materials to be used
___3. Layout and description of irrigation, sprinkler, or water systems including placement of water sources.
___4. Description of maintenance provision
___5. Intersection sight distance visibility triangles shown on the plan
___6. Landscaping area and tree mitigation

I hereby confirm that this application is complete and all required information is attached. I further agree to comply with all platting and subdivision design requirements of the City of West Lake Hills. I understand that the permit will not be issued unless staff comments are satisfactorily addressed.

_____ _____

Signature of Owner/Applicant Date

_____

Print Name & Title

GENERAL NOTES

1. All materials and construction methods for site grading, paving, sitework, and drainage shall be in accordance with the current City of Austin Standard Specifications, unless otherwise noted. All work shall be in accordance with the building codes, ordinances, safety codes, and rules and procedures of the City of West Lake Hills.
2. All responsibility for the adequacy of these plans remains with the Engineer who prepared them. In reviewing these plans, the City of West Lake Hills must rely on the adequacy of the work of the design engineer.
3. Prior to any construction, the Contractor shall apply for and secure all proper permits from the appropriate authorities.
4. Blasting or burning shall not be permitted on this project.
5. The contractor shall verify all depths and locations of existing utilities prior to beginning construction. Any discrepancies with the construction plans found in the field shall be brought to the attention of the design engineer immediately. The design engineer shall be responsible for revising the plans as appropriate and submitting a revision to the City.
6. Contractor will be responsible for keeping roads and drives adjacent to and near the site free from soil, sediment, and debris. Contractor will not remove soil, sediment, or debris from any area or vehicle by means of water, only shoveling and sweeping will be allowed. Contractor will be responsible for dust control from the site.
7. Any existing utilities, pavement, curbs, sidewalks, structures, trees, etc., not planned for destruction or removal or other public infrastructure damaged or removed will be by the contractor at his expense before acceptance of the project.
8. After the construction permit has been issued and prior to the beginning construction, the owner or his representative shall schedule a pre-construction conference between the City of West Lake Hills, Design Engineer, Contractor(s), other utility companies, and any other affected parties. The City of West Lake Hills shall be contacted to set up the meeting at least 48 hours prior to the proposed meeting time.
9. Any changes or revisions to these approved plans must be submitted by the design engineer and approved by the City of West Lake Hills prior to construction of the revision.
10. Available benchmarks that may be utilized for the construction of this project are described as follows:

TRENCH SAFETY NOTES

1. In accordance with the Laws of the State of Texas and the U. S. Occupational Safety and Health Administration regulations, all trenches over 5 feet in depth in either hard and compact or soft and unstable soil shall be sloped, shored, sheeted, braced or otherwise supported. Furthermore, all trenches less than 5 feet in depth shall also be effectively protected when hazardous ground movement may be expected. Trench safety systems to be utilized for this project will be provided by the contractor.
2. In accordance with the U. S. Occupational Safety and Health Administration regulations, when persons are in trenches 4-feet deep or more, adequate means of exit, such as a ladder or steps, must be provided and located so as to require no more than 25 feet of lateral travel.
3. If trench safety system details were not provided in the plans because trenches were anticipated

to be less than 5 feet in depth and during construction it is found that trenches are in fact 5 feet or more in depth or trenches less than 5 feet in depth are in an area where hazardous ground movement is expected, all construction shall cease, the trenched area shall be barricaded and the Engineer notified immediately. Construction shall not resume until appropriate trench safety system details, as designed by a professional engineer, are retained and copies submitted to the City of West Lake Hills.

STREET AND DRAINAGE NOTES

1. All testing shall be done by an independent laboratory at the Applicant's expense. A City Inspector shall be present during all tests. Testing shall be coordinated with the City Inspector and he shall be given a minimum of 24-hour notice prior to any testing.
2. Backfill behind the curb shall be compacted to obtain a minimum of 85% maximum density to within 3 inches of the top of curb. Material used shall be primarily granular with no rocks larger than 3 inches in the greatest dimension. The remaining 3 inches shall be clean topsoil free from all clods and suitable for sustaining plant life.
3. All RCP shall be minimum Class III.
4. The subgrade material for the streets shown herein was tested by_____. The paving sections were designed by_____in accordance with the current City of West Lake Hills design criteria. The paving sections are to be constructed as follows:

Street	Station	Flex. Base Thickness	HMAC Thickness	Lime Stab. Thickness

5. Lots in this subdivision are located over the Edwards Aquifer Recharge Zone and subject to the current Texas Commission on Environmental Quality Edwards Rules. No building permit will be issued by the City of West Lake Hills until the requirements of the Edwards Rules are fully complied with. The applicant for a building permit is responsible for furnishing the City written compliance to the Edwards Aquifer Rules from the Texas Commission on Environmental Quality. (if applicable)
6. The FEMA maps for the City of West Lake Hills, Texas, indicate that the property shown hereon does/does not lie within a special flood hazard area as defined by FIRM Panel_____, dated _____."
7. FLOOD WARNING: The degree of flood protection required by the City of West Lake Hills Flood Damage Prevention Ordinance is considered reasonable for regulatory purposes and is based on scientific and engineering considerations. On rare occasions, greater floods can and will occur and flood heights may be increased by man-made or natural causes. Acceptance of this plan by the City Council does not imply that land outside the areas of special flood hazards or uses permitted within such areas will be free from flooding or flood damages. Nor shall acceptance of this plan create liability on the part of the City of West Lake Hills or any official or employee thereof for any flood damages that result from reliance on the information contained within this plan or any administration decision lawfully made hereunder.

TRAFFIC MARKING NOTES

1. Barricades built to the Texas Manual on Uniform Traffic Control Devices standards shall be constructed on all dead-end streets and as necessary during construction to maintain job and public safety.

2. Any methods, street markings, and signage necessary for warning motorists, warning pedestrians, or diverting traffic during construction shall conform to the Texas Manual of Uniform Traffic Control Devices for Streets and Highways, latest edition.
3. All pavement markings, markers, paint, traffic buttons, traffic controls, and signs shall be installed in accordance with the Texas Department of Transportation Standard Specifications for Construction of Highways, Streets and Bridges and the Texas Manual of Uniform Traffic Control Devices for Streets and Highways, latest editions.

EROSION CONTROL NOTES

1. Every lot in this subdivision is subject to the City of West Lake Hills' site clearance procedures. No site clearance, excavation, grading or landfill shall commence unless a permit shall have first been issued for such work in accordance with the provisions of applicable ordinances. Impervious cover shall not exceed the maximum percentage permitted under City Ordinance.
2. The contractor shall install erosion/sedimentation controls and tree/natural area protective fencing prior to any site preparation work (clearing, grubbing or excavation). The placement of erosion/sedimentation controls shall be in accordance with the current City West Lake Hills Drainage and Erosion Control Manual and the approved Erosion and Sedimentation Control Plan. No erosion controls shall be placed beyond the property lines of the site unless written permission has been obtained from adjacent property owners.
3. All slopes shall be sodded or seeded with approved grass, grass mixtures, or ground cover suitable to the area and season in which they are applied.
4. Any major variation in materials or locations of controls or fences from those shown on the approved plans will require a revision and must be approved by the Engineer. Major revisions must be approved by the City. Minor changes to be made as field revisions to the Erosion and Sedimentation Control Plan may be required by the City Inspector during the course of construction to correct control inadequacies.
5. The contractor is required to inspect the controls at weekly intervals and after any rainfall event to ensure that they are functioning properly. The person(s) responsible for maintenance of controls and fences shall immediately make any necessary repairs to damaged areas. Silt accumulation at controls must be removed when the depth reaches six (6) inches.
6. All temporary erosion control measures shall not be removed until final inspection and approval of the project by the City Inspector. It shall be the responsibility of the Contractor to maintain all temporary erosion control structures and to remove each structure as approved by the City Inspector.
7. Per TPDES requirements, disturbed areas on which construction activities have ceased (temporarily or permanently) shall be stabilized within 14 days unless activity resumes within 21 days. Seeding does not constitute as stabilization.
8. Stripping of vegetation from project sites shall be phased so as to expose the minimum amount of area to soil erosion for the shortest possible period of time per the Drainage and Erosion Control Design Manual Sec.7.1(l).
9. Prior to final acceptance by the City, haul roads and waterway crossings constructed for temporary contractor access must be removed, accumulated sediment removed from the waterway and the area restored to the original grade and revegetated. All land clearing debris shall be disposed of in approved spoil disposal sites.

OWNERS CERTIFICATION

AS OWNER OF THIS PROPERTY, I INTEND TO DEVELOP AND MAINTAIN THIS PROPERTY AS DESCRIBED BY THIS PLAN

NAME OF OWNER/TRUSTEE DATE

ENGINEERS CERTIFICATION

STATE OF TEXAS

COUNTY OF TRAVIS

I, (LICENSED PROFESSIONAL ENGINEER), DO HEREBY CERTIFY THAT THE PUBLIC WORKS AND DRAINAGE IMPROVEMENTS DESCRIBED HEREIN HAVE BEEN DESIGNED IN COMPLIANCE WITH THE CITY OF WEST LAKE HILLS CODE OF ORDINANCES, THE CITY MASTER PLAN AND CITY POLICY.

(SEAL & SIGNATURE OF PROFESSIONAL ENGINEER)

NAME OF PROFESSIONAL ENGINEER DATE

CITY ACCEPTANCE BLOCK

ALL RESPONSIBILITY FOR THE ADEQUACY OF THESE PLANS REMAINS WITH THE ENGINEER WHO PREPARED THEM. IN ACCEPTING THESE PLANS, THE CITY OF WEST LAKE HILLS MUST RELY UPON THE ADEQUACY OF THE WORK OF THE DESIGN ENGINEER.

ACCEPTED FOR CONSTRUCTION:

CITY ADMINISTRATOR DATE