ARTICLE 19

FLOODPLAIN CONSERVATION AND PROTECTION

19-1 INTENT - The designation of flood hazard areas and the regulations imposed on these zones are intended to provide for public awareness of the flooding potential, protect human life and health, minimize public and private property damage, protect individuals from buying lands and structures which are unsuited for intended purposes because of flood hazards, and minimize surface and ground water pollution and erosion of the floodplain soils which will adversely affect human, animal or plant life. It is the intent of this Article to control development which will, when acting alone or in combination with similar development, create an unjustified demand for public investment in flood control works by requiring that users vulnerable to floods, including public facilities which serve such uses, be protected against flood damage at the time of initial construction; cause additional flood losses if public streets, sewers, water, and other utilities must be extended below the flood level to serve the development; create an additional burden to the public to pay the costs of rescue, relief, emergency preparedness measures or storm sewer systems; create an additional burden to the public for business interruptions, disruption of transportation routes, interference with utility services and other factors that result in the loss of wages, sales production and tax revenue.

19-2 DEFINITIONS - Unless specifically defined below, words or phrases used in this ordinance shall be interpreted so as to give them the meaning they have in common usage and to give this ordinance its most reasonable application.

FLOOD - A temporary rise in stream flow or stage that results in water overtopping its bank and inundating areas adjacent to the channel.

FLOODPLAIN - That land, adjacent to a stream, channel, or a body of water, which has been or may be hereafter covered by flood water during the regulatory flood. Floodplain shall include those lands which are included in the special flood hazard areas~~, and those lands that are determined to be included within the post-development floodplain~~.

FLOODPLAIN VARIANCE - A grant of relief from the requirements of this Article which permits construction or use in a manner otherwise prohibited by this Article where specific enforcement would result in unnecessary hardship.

FLOOD PROFILE - The elevation (usually above mean sea level) of the water surface in a stream during flood discharges. The flood profile that exists during a flood depends upon the flood discharge and stream characteristics. Both the flood discharges of a given frequency and the stream characteristics change with time as the land use on upstream watersheds change and as the stream is changed due to vegetation, bridges, culverts, obstructions, etc. The flood profile can be used to determine the exact limits of the floodplain.

FLOODPROOFING - A combination of structural provisions, changes, or adjustments to properties and structures subject to flooding primarily for the reduction or elimination of flood damages to properties, water and sanitary facilities, structures, and contents of buildings in a flood hazard area.

FLOODWAY - That portion of the floodplain that is reserved in order to discharge the base flood without cumulatively increasing the water surface elevation more than one (1) foot.

LOWEST FLOOR - The lowest floor of the lowest enclosed area (including basement) of a structure. Lowest floor shall not include an unfinished or flood resistant enclosure, usable solely for parking of vehicles, building access or storage, in an area other than a basement area, provided that such enclosure is built in compliance with the applicable design requirements of this ordinance.

LOWEST OPENING - The lowest opening into a structure, including doors and windows, sills, foundation vents, the top of window wells, crawl space entrances, and the top landing of exterior stairways and other openings leading to below grade spaces. Lowest opening shall not include access to an unfinished or flood resistant enclosure used solely for parking of vehicles, or for building access or storage, nor shall it include openings intended and used solely for the purpose of providing hydrostatic venting.

OBSTRUCTION - Any dam, wall, wharf, embankment, levee, dike, pile, abutment, projection, excavation, channel rectification, bridge, conduit, culvert, building, wire, fence, rock, gravel, refuse, fill, structure or matter in, along, across or projecting into any channel,

watercourse, or regulatory flood hazard area which may impede, retard, or change the direction of the flow of water, either in itself or by catching or collecting debris carried by such water, or that is placed where the flow of water might carry the same downstream to the damage of life or property.

POST-DEVELOPMENT FLOODPLAIN - The portion of land adjacent to a stream which is anticipated to be covered with water during the 100-year, 24-hour storm, based on a fully developed watershed and calculated using the procedures of the Division of Engineering Stormwater Manual.

REGULATORY FLOOD – A flood of a magnitude having a one percent (1%) chance of occurring in any given year and which, over a long period of time, can be expected to be equaled or exceeded, on the average, once every 100 years. The limits of the regulatory flood for a site shall be determined by reference to the elevations shown on the Federal Emergency Management Agency Flood Insurance Rate Maps and Flood Boundary and Floodway Maps, where such data is available~~, or shall be the post-development floodplain, whichever is greater~~. Base flood shall be synonymous with regulatory flood.

REGULATORY FLOOD PROTECTION ELEVATION – The elevation of the lowest floor ~~or the lowest opening~~ of a structure which shall be two (2) feet or more above the water-surface elevation of the regulatory flood.

SPECIAL FLOOD HAZARD AREA - That land shown as the Special Flood Hazard Area (Zones A and AE) including the channel, floodway, and floodplain of the base flood, as shown on the Federal Emergency Management Agency (FEMA) Digital Flood Insurance Rate Maps and Flood Boundary and Floodway Maps, dated March 3, 2014 (and any revisions thereto including through a Letter of Map Amendment or a Letter of Map Revision) of the Federal Insurance Administration report entitled "The Flood Insurance Study for Lexington-Fayette Urban County Government, Kentucky" (such maps may hereafter be referred to as FEMA Maps).

STREAM – Any river, creek, or channel **that is defined as a stream by KRS 151.100** ~~having well defined banks, in which water flows for substantial periods of the year. Stream shall include all perennial streams shown as solid blue line, and intermittent streams shown as dashed blue line, on the USGS 7.5 minute topographic maps. A channel that is not shown as a dashed or solid blue line on a USGS Map shall be considered a stream if it has a drainage area of at least 50 acres~~.

WATERSHED - Is the region or area which drains into a river, lake or stream. The total area included within a watershed will vary, depending on the drainage system being considered; but usually the total area above a given point on a stream, channel, or lake that contributes runoff water to the stream or lake at that point is called a watershed.

19-5 LANDS TO WHICH THIS ARTICLE APPLIES - This Article shall apply to all lands within the jurisdiction of the Lexington-Fayette Urban County Government which meet the following:

(a) Special Flood Hazard Areas as defined herein.

(b) ~~The post-development floodplain as it has been established through the subdivision or development plan process which may include all, or portions of, the Special Flood Hazard Area. These areas are not subject to the mandatory flood insurance provisions of the Federal Flood Insurance Administration, but are subject to the land use controls of this Article including, but not limited to, regulatory flood protection elevations.~~

~~(c)~~ Areas of Alluvial Soils as regulated in 19-~~19~~ **13** herein.

(c)~~(d)~~ Areas adjoining or adjacent to the floodplain that are Vegetative Buffer **Zones** ~~Strips~~ or Floodplain Setback Areas.

19-6 INTERPRETATION OF THE FLOOD HAZARD BOUNDARIES - The Division of Building Inspection and the Division of Planning shall refer questions as to the interpretation of the Flood Hazard Boundaries to the Urban County Engineer, who shall be empowered to interpret the boundaries of any flood hazard area based upon the Division of Engineering Stormwater Manual, and sound engineering practices. Appeals to the Urban County Engineer's interpretation shall be as outlined in Section 19-13 herein below. The following principles shall be used to guide the Urban County Engineer:

(a) The provisions of this Article shall be considered as minimum requirements;

(b) The Urban County Engineer shall liberally construe the provisions of this Article in favor of the objective of flood protection; and

(c) This Article shall be deemed neither to limit nor to repeal any other powers granted under state statute or federal law.

19-7 STANDARDS APPLICABLE TO ALL SPECIAL FLOOD HAZARD AREAS ~~AND POST DEVELOPMENT FLOODPLAINS~~ – Unless otherwise specified, the following standards are applicable in all special flood hazard areas ~~and all post development floodplains~~:

19-7(a) PROHIBITED USES – The following uses shall be prohibited in special flood hazard areas ~~and in post development floodplains~~ unless granted through a special permit or as a floodplain variance:

(1) Excavating, grading or filling which disturbs the natural grade of the floodplain. Failure to comply with this prohibition shall constitute a violation of this Zoning Ordinance subject to a civil citation, fine and/or abatement, as provided in Article 5.
(2) Principal or accessory buildings, including but not limited to, manufactured buildings for residential, business, office, or industrial use.

19-7(b) PERMITTED ACTIVITIES - The following uses having low obstructive effect shall be permitted in the floodplain to the extent that they are not prohibited by any other ordinance and provided that they do not require grading, filling, structures, storage of materials and equipment, or any other obstructive features:

(1) Agricultural uses, such as general farming, pasture, grazing, outdoor plant nurseries, horticulture, viticulture, truck farming, forestry, sod farming, or wild crop harvesting. Agricultural fences necessary for those uses are permitted.
(2) Uses accessory to private and public recreational uses, such as golf courses, driving ranges, archery ranges, picnic grounds, boat-launching ramps, parks, wildlife and nature preserves, game farms, fish hatcheries, shooting preserves, target ranges, trap and skeet ranges, hunting and fishing areas, and hiking and horseback riding trails, pedestrian trails and crossings.
(3) Uses accessory to residential uses, such as lawns, gardens, parking areas, and play areas.
(4) Functionally dependent uses as defined herein.
(5) Detention and retention basins when designed and constructed as per the Engineering Manuals, and meeting all State and Federal regulations.

19-7(c) LOTS IN A SPECIAL FLOOD HAZARD AREA – Where a new structure is proposed on an existing lot that includes a regulatory flood area, and no regulatory flood protection elevation is shown on the final record plan for the lot, the lowest **floor** ~~opening~~ of the structure shall be at or above the regulatory flood protection elevation as determined through reference to the Federal Insurance Administration report, "The Flood Insurance Study for Lexington-Fayette Urban County Government, Kentucky." Where a substantial improvement of an existing structure is proposed on a lot that includes a regulatory flood area, and no regulatory flood protection elevation is shown on the final record plan for the lot, the lowest floor of the structure shall be at or above the regulatory flood protection elevation as determined through reference to the Flood Insurance Administration report, "The Flood Insurance Study for Lexington-Fayette Urban County Government, Kentucky." Where a new structure or substantial improvement of an existing structure is proposed within a special flood hazard area, and neither the final record plan nor the Flood Insurance Study specifies a regulatory flood elevation for the stream, a licensed professional engineer shall determine the regulatory flood elevation, or the applicant may request assistance from the Kentucky Division of Water. ~~The engineer may use the Contour Interpolation Method, contained in the Stormwater Manual, to determine the regulatory flood elevation, which shall be the basis for establishing the regulatory flood protection elevation.~~

19-7(d) LOTS WITH A REGULATORY FLOOD PROTECTION ELEVATION – Where a new structure or substantial improvement of an existing structure is proposed on a lot which has a regulatory flood protection elevation noted on the final record plan of the property, the lowest floor ~~and the lowest opening of the structure~~ shall be at or above the noted elevation.

19-7(e) UTILITY STANDARDS - All utilities shall be designed and located to minimize their potential for flooding during the regulatory flood. All new and replacement water supply systems shall be designed to minimize or eliminate infiltration of flood water into the system. New or replacement sanitary sewage systems shall be designed to minimize or eliminate infiltration of flood waters in the systems and discharges from the systems into flood waters. On-site waste disposal systems shall be located to avoid impairment to them or contamination from them during flooding. Electrical, heating, ventilation, plumbing, and air-conditioning equipment and other service facilities shall be designed and/or located so as to prevent water from entering or accumulating within the components during conditions of flooding.

19-7(f) ADDITIONS TO EXISTING STRUCTURES - Additions to structures that were lawfully constructed on fill or at an elevation which was permitted prior to the adoption or amendment of this Article shall be permitted provided:

(1) the addition does not constitute substantial improvement to the structure,
(2) the addition does not require filling in the floodplain,
(3) the floor elevation of the addition is proposed to be at least at the regulatory flood-protection elevation.

19-7(g) GENERAL STANDARDS FOR MAJOR SUBDIVISION PLANS AND DEVELOPMENT PLAN PROPOSALS – All storm water facilities shall be designed and constructed~~, and all post development floodplains shall be calculated,~~ in conformance with the requirement of the Division of Engineering Stormwater Manual. All major subdivision plans and final development plans shall, at a minimum, be subject to the following requirements. Failure to comply with these standards during construction or with requirements established by these standards during or after construction shall be a violation of this Zoning Ordinance, subject to a civil citation, fine and/or abatement, as provided in Article 5.

19-7(g)(1) PRELIMINARY SUBDIVISION AND PRELIMINARY DEVELOPMENT PLAN REQUIREMENTS – In order to protect the floodplain during infrastructure construction, a preliminary subdivision plan and/or a preliminary development plan shall indicate the location of a Vegetative Buffer **Zone** ~~Strip~~. The Vegetative Buffer **Zone** ~~Strip~~ shall be **50** ~~25~~ feet, measured horizontally from the centerline, on each side of intermittent streams and **50** ~~25~~ feet, measured horizontally from the edge of the bank, on each side of perennial streams. **The 50-foot criterion for the width of the vegetative buffer zone may be established on an average width basis at a project, as long as the minimum width of the buffer zone is 25 feet or more at any measured location.** The boundary of the Vegetative Buffer **Zone** ~~Strip~~ may be located inside or outside the horizontal limits of the floodplain. Within the Vegetative Buffer **Zone** ~~Strip~~, there shall be no grading, filling, trenching, soil compaction, removal of vegetation, or other disturbance of the soil or ground cover (including parallel utilities), or the storage of equipment or materials during the construction of the infrastructure.

19-7(g)(2) FLOODPLAIN ANALYSIS – ~~For any property in any zone one (1) acre in size or larger, containing or adjacent to a Special Flood Hazard Area as defined herein, or adjoining a stream having minimum drainage area of 50 acres or greater, a floodplain analysis shall be required, in conformance with the Division of Engineering Stormwater Manual, to determine the post development floodplain.~~ **A floodplain analysis shall be conducted when required by the Stormwater Manual.** Such analysis shall not be required for the subdivision of property in a residential or agricultural zone for which no infrastructure improvements are proposed; however, the Planning Commission may require a floodplain analysis for such a subdivision in locations of known flooding.

19-7(g)(3) REVISION OF THE SPECIAL FLOOD HAZARD AREA – If the watershed study determines that the proposed development will cause the ~~post development~~ floodplain to be different than the Special Flood Hazard Area depicted on the Digital Flood Insurance Rate Maps, the project engineer shall prepare and submit the appropriate Letter of Map Change (which may include C-LOMR, LOMR, LOMA, LOMR-F, or other appropriate filing) to FEMA.

19-7(g)(4) FINAL RECORD PLAN AND FINAL DEVELOPMENT PLAN REQUIREMENTS – Final record plans and final development plans that include or adjoin a special flood hazard area ~~or a post development floodplain~~ shall include and show the floodplain boundaries. Regulatory flood elevations (in relation to mean sea level) shall be noted.

(a) REGULATORY FLOOD PROTECTION ELEVATION - The final record plan shall show the Regulatory Flood Protection Elevation (RFPE) for each lot that includes or is adjacent to a floodplain, and the final development plan shall show the RFPE for each such building.

(b) MINIMUM SETBACK - All lots which contain or adjoin a floodplain shall have a minimum building setback from the floodplain of twenty-five (25) feet depicted on the final record plan and on the final development plan. This building setback shall be measured horizontally from the edge of the floodplain and shall be applicable to all principal and accessory buildings on the lot.

(c) VEGETATIVE BUFFER **ZONE** ~~STRIP~~ - In order to protect the stream from inappropriate activities, there shall be a vegetative buffer **zone** ~~strip~~ of **50** ~~25~~ feet, measured horizontally from the centerline, on each side of intermittent streams and **50** ~~25~~ feet, measured horizontally from the edge of the bank, on each side of perennial streams. **The 50-foot criterion for the width of the vegetative buffer zone may be established on an average width basis at a project, as long as the minimum width of the vegetative buffer zone is 25 feet or more at any measured location.** The vegetative buffer **zone** ~~strip~~ may coincide with greenways or the setback required above. Within the vegetative buffer **zone** ~~strip~~, there shall be no grading, filling, removal of vegetation, or other disturbance of the soil or ground cover, or construction of principal or accessory buildings.

19-7(g)(5) SUBDIVISION AND DEVELOPMENT PLAN REVIEW STANDARDS - All subdivision and development plans shall be consistent with the need to minimize flood damage and shall have public utilities and facilities such as sewer, gas, electrical, and water systems located and constructed to minimize flood damage to it and to other uses. The following public facilities shall be permitted in the floodplain:

(a) Temporary sediment ponds that will be converted to permanent storm water management ponds, provided they are located outside the horizontal limits of the vegetative buffer **zone** ~~strip~~.

(b) Roadways and utilities that cross at angles within 10 degrees of being perpendicular to the water or to the floodplain.

(c) Sanitary sewers, which shall be constructed outside the horizontal limits of the 10-year ~~post-development~~ floodplain, with manhole covers set at an elevation one (1) foot above the elevation of the regulatory flood.

(d) Storm sewer pipe outlets where the outlet terminates at the edge of the ~~post-development~~ floodplain.

19-7(h) STREAMS WITHOUT ESTABLISHED BASE FLOOD ELEVATIONS OR WITHOUT FLOODWAYS - Within Special Flood Hazard Areas, where streams exist but no base flood data has been provided, or where base flood data has been provided without a floodway, the following provisions shall apply:

(1) No encroachments, including fill material or structures, shall be located within special flood hazard areas, unless certification by a professional engineer is provided demonstrating the pre-development Base Flood Elevation and that the cumulative effect of the proposed development, when combined with all other existing and anticipated development, will not increase the water surface elevation of the base flood more than one foot at any point. The engineering certification must be supported by technical data that conforms to standard hydraulic engineering principles.

(2) New construction, substantial improvement or an addition to an existing structure shall be elevated or flood-proofed to at least the regulatory flood protection elevation and shall meet the requirements of Article 19-8, as necessary.

19-8 SPECIAL PERMIT USES – Special permit uses in the floodplain may be permitted only where existing streets or utilities are at elevations which make construction outside the horizontal limits of the floodplain impractical, or in other special circumstances. Structures shall ordinarily be located outside the horizontal limits of the floodplain and at least two feet above the elevation of the regulatory flood, but may be allowed as a special permit use, to be elevated or flood-proofed to a point above the regulatory flood protection elevation. Such structures shall be limited to those that will not be subject to substantial flood damage and which will not substantially affect the capacity of any stream or increase the regulatory flood elevation. All special permit uses shall be located outside the horizontal limits of the vegetative buffer **zone** ~~strip~~, and no structure shall be permitted as a special permit use within the floodway. A licensed professional engineer shall develop and/or review structural design, specifications, and plans for the construction, and shall certify that the design and methods of construction are in accordance with accepted standards of practice for meeting the requirements herein. Such certification, including the specific elevation (in relation to mean sea level) to which such structure is elevated or flood-proofed, shall be provided to the Division of Engineering as a part of the application for the special permit. Failure to comply with the standards for a special permit or with any conditions attached to the special permit shall be a violation subject to a civil citation, fine and/or abatement, as provided in Article 5.

19-8(a) MANUFACTURED HOMES - Any manufactured home permitted in any floodplain as a special permit use shall be elevated so as to be at or above the regulatory flood protection elevation and anchored to resist flotation, collapse, or lateral movement. Methods of anchoring may include, but are not limited to, use of over-the-top and frame ties to ground anchors. Federal Emergency Management Agency Manual (FEMA #85), "Manufactured Home Installation in Flood Hazard Areas," published in September 1985, shall be the basis for determination of compliance with this section. This requirement is in addition to applicable State and local anchoring requirements for resisting wind forces.

19-8(b) FLOOD-PROOFED BUILDINGS - New construction or substantial improvement of an existing structure for business, office, industrial or other non-residential use, so as to be flood-proofed, shall be permitted as a special permit use, provided that below the regulatory flood protection elevation the structure is water tight with walls substantially impermeable to the passage of water, and with the structural components capable of resisting hydrostatic and hydrodynamic loads and the effects of buoyancy.

19-8(c) NEW STRUCTURES ON FILL – New construction or substantial improvement of an existing structure on fill shall be permitted as a special permit use, provided the lowest floor ~~and the lowest opening are~~ **is** at or above the regulatory flood protection elevation. Such fill shall be at least one (1) foot above the regulatory flood elevation for the particular area and shall extend at that same elevation towards the stream channel for a distance of at least fifteen (15) feet beyond the limits of the structure thereon. However, no use shall be constructed which adversely affects the capacity of streams or floodplains of any main stream or tributary to the main stream, drainage ditch, or any other drainage facility or system, or will increase the regulatory flood elevation.

19-8(d) ELEVATED BUILDINGS - New construction or substantial improvements of elevated buildings that include fully enclosed areas formed by foundation and other exterior walls below the base flood elevation shall be designed to preclude finished living space and designed to allow for the entry and exit of floodwaters to automatically equalize hydrostatic flood forces on exterior walls. Designs for complying with this requirement must be certified by a licensed professional engineer and shall meet the following minimum criteria:

(1) The structure shall have a minimum of two openings for hydrostatic venting, having a total net area of not less than one square inch for every square foot of enclosed area subject to flooding; and

(2) The bottom of all such openings shall be no higher than one foot above grade; and

(3) Such openings may be equipped with screens, louvers, valves or other coverings or devices, provided they permit the automatic flow of floodwaters in both direction; and

(4) Electrical, plumbing, and other utility connections are prohibited below the regulatory flood protection elevation; and

(5) Access to the enclosed area shall be the minimum necessary to allow for parking of vehicles (garage door) and the limited storage of maintenance equipment used in connection with the premises (standard exterior door) or entry to the living area (stairway or elevator); and

(6) The interior portion of such enclosed area shall not be partitioned or finished into separate rooms.

19-8(e) PARKING LOTS AND PARKING STRUCTURES - Parking lots and parking structures shall be permitted in the floodplain as special permit uses.

19-8(f) OTHER USES - Uses such as tennis courts, for which fences are an integral requirement, shall be permitted as a special permit use in the floodplain. Fences must be designed and located to minimize obstruction of the floodplain. Swimming pools shall not be permitted in the floodplain.

19-9 PROCEDURES AND STANDARDS FOR ISSUING SPECIAL PERMITS – Any permit request, subdivision plan or development plan involving a special permit use shall be processed as provided below.

19-9(a) FILING - The Division of Building Inspection shall review all requests for building or location permits in order to determine whether such requests would require a special use permit under the provisions of this Article. The Division of Building Inspection shall refer any request requiring a special permit to the Division of Engineering. Should the Division of Building Inspection be unable to positively determine whether a special permit is required, the request will be referred to the Division of Engineering for such determination. Where a final development plan or a preliminary subdivision plan is filed for consideration by the Planning Commission, the responsible Division shall

refer such plan to the Division of Engineering for review. The Division of Engineering shall process all such requests as described herein.

19-9(b) REVIEW BY THE DIVISION OF ENGINEERING - The applicant for a Special Permit shall be required to furnish such of the following information as is deemed necessary by Division of Engineering to determine the suitability of the particular site for the proposed use:

(1) Plans drawn to scale showing the nature, location, dimensions, and elevation for the lot, existing or proposed structures, obstructions, fill, storage of materials, flood-proofing measures, and the relationship of the above to the location of the stream channel, floodway, and the regulatory flood protection elevation.

(2) A typical valley cross-section showing the channel of the stream, elevation of the land area adjoining each side of the channel, cross-section of areas to be occupied by the proposed development and high water information.

(3) Plans (surface view) showing elevations or contours of the ground; pertinent structures, fill or storage elevations; size, location, and spatial arrangement of all proposed and existing structures and obstructions on the site; location and elevations of streets, water supply, sanitary facilities; photographs showing existing land uses, trees, and other vegetation upstream and downstream, soil types, and other pertinent information.

(4) A profile showing the slope of the bottom of the channel or flow line of the stream.

(5) Specifications for building construction and materials, flood-proofing, water supply, and sanitary facilities; and, where proposed, filling, dredging, grading, and storage of materials.

(6) Such other information as may be necessary to evaluate the proposed development in terms of the flood hazard created.

19-9(c) TECHNICAL ASSISTANCE - The Division of Engineering may require the applicant to transmit one copy of the information required above to a designated engineer or other expert person or agency for technical assistance where necessary to aid in evaluating the proposed project in relation to flood heights and velocities; the seriousness of flood damage to the use; the adequacy of the plans for protection; and other technical matters.

19-9(d) ADDITIONAL PERMITS - The Division of Engineering shall advise applicants that additional federal or state permits may be required, and if specific federal or state permits are known, require that copies of such permits be provided and maintained on file with the special use permit.

19-9(e) FACTORS WHICH SHALL BE CONSIDERED - In considering an application for a Special Permit, all relevant factors shall be considered in order to ensure that the purpose and intent of this ordinance are met. The Division of Engineering shall also consider the following factors:

(1) The danger to life and property due to increased flood heights or velocities caused by encroachments.

(2) The danger that materials may be swept onto other lands or downstream to the injury of others.

(3) The proposed water supply and sanitation systems and the ability of these systems to prevent disease, contamination, and unsanitary conditions.

(4) The susceptibility of the proposed facility and its contents to flood damage and the effect of such damage on the individual owners.

(5) The importance of the services provided by the proposed facility to the community.

(6) The availability of alternative locations not subject to flooding for the proposed use.

(7) The compatibility of the proposed use with existing development and development anticipated in the foreseeable future.

(8) The relationship of the proposed use to the adopted Comprehensive Plan and other adopted Community Plans, the uses otherwise permitted in the zone, and the floodplain management program for the area.

(9) The safety of access to the property in times of flood for ordinary and emergency vehicles.

(10) The expected heights, velocity, duration, rate of rise, and sediment transport of the flood waters expected at the site.

(11) Such other factors which are relevant to the purposes of this ordinance.

19-9(f) CONDITIONS ATTACHED TO ALL SPECIAL PERMITS - Upon consideration of the factors listed above and for the purposes of this ordinance, conditions may be attached to the granting of special permits as are deemed necessary to further the purposes of this ordinance. Among such conditions, without limitation because of specific enumeration, may be modification of waste disposal and water-supply facilities, limitations on periods of use and operation, imposition of operational controls, sureties, deed restrictions, requirements for construction of channel modifications, dikes, levees, and other protective measures, flood-proofing measures which shall be designed consistent with the regulatory flood protection elevation for the particular area, considering flood velocities, durations, rate of rise, hydrostatic and hydrodynamic forces, and other factors associated with the regulatory flood. The Urban County Engineer shall require the applicant to submit a plan or document certified by a licensed professional engineer that the flood-proofing measures are consistent with the regulatory flood-protection elevation and associated flood factors for the particular area. The following flood-proofing measures may be required without limitation because of specific enumeration:

(1) Structural anchorage such as addition of mass or weight to structures to resist flotation or anchorage to resist flotation and lateral movement.

(2) Waterproofing measures such as installation of watertight doors, bulkheads, and shutters, or similar methods of construction; use of paints, membranes, or mortars to reduce seepage of water through walls; construction of water supply and waste treatment systems so as to prevent the entrance of flood waters; installation of valves or controls on sanitary and storm drains which will permit the drains to be closed to prevent back-up of sewage and storm waters into the buildings or structures. Gravity draining of basements may be eliminated by mechanical devices.

(3) Structural reinforced construction to resist rupture or collapse caused by water pressure or floating debris.

(4) Water removal devices such as installation of pumps to lower water levels in structures and installation of pumping facilities or comparable practices for subsurface drainage systems for buildings to relieve external foundation, wall and basement flood pressures.

(5) Location of hazardous equipment, including all electrical equipment, circuits, and installed electrical appliances, in a manner which will assure they are not subject to flooding and to provide protection from inundation by the regulatory flood. Any structural storage facilities for chemicals, explosives, buoyant materials, flammable liquids, or other toxic materials which could be hazardous to public health, safety, and welfare shall be designed and constructed in a manner which will assure the facilities are at or above the regulatory flood protection elevation or are adequately flood-proofed to prevent flotation of storage containers, or damage to storage containers, which could result in the escape of toxic materials into flood waters.

19-9(g) URBAN COUNTY ENGINEER'S REVIEW - The Urban County Engineer shall be empowered to approve, conditionally approve or deny any request for a special permit. However, this power is not construed to give the Urban County Engineer authority to grant floodplain variances from the provisions of this Article. Any request for a floodplain variance shall follow the procedures below. Every effort shall be made to complete the review and to render a decision within sixty (60) days of the submission of a completed application. However, failure to complete the review within the time period shall not constitute approval or denial of the special permit. The Urban County Engineer shall notify the Division of Building Inspection of this decision, in writing, giving reasons for granting or denying the request and conditions of approval (if any) of the special permit.

19-9(h) SPECIAL PERMITS ON PUBLICLY OWNED LAND - Any activity requiring a special permit that is proposed to be constructed on land owned by the Lexington-Fayette Urban County Government shall be approved by the Urban County Council prior to issuance of the special permit.

19-9(i) KENTUCKY DEPARTMENT OF NATURAL RESOURCES, DIVISION OF WATER - The Division of Water has authority to review all plans involving any obstructive effect on the stream and floodplain in accordance with KRS 151. In any situation where approval of the Division of Water is required, a copy of such shall be submitted to the Urban County Engineer as a part of the review materials. If the Division of Water disapproves the request, no officer, department or board of the Urban County Government shall have the authority to approve the request.

19-10 APPEAL FROM DECISION OF THE URBAN COUNTY ENGINEER - The decision of the Urban County Engineer regarding the flood hazard status of any property, or approval or denial of a special permit, may be appealed by the property owner or an objector to the Urban County Engineer's decision within 60 days. The appellant shall clearly state the location of the property, the reason for the appeal, and include such other information as may be necessary to evaluate the proposal. The appeal shall be referred to the Floodplain Appeals Committee and shall follow the procedure established herein.

19-10(a) MEMBERSHIP - The Floodplain Appeals Committee shall consist of five members to be appointed by action of the Planning Commission. One member shall be the Commissioner of Public Works or the Commissioner's designee, one member shall be a member of the Planning Commission, one member shall be a member of the Urban County Council, one member shall be a professional engineer licensed in Kentucky and in private practice, and one member shall be a member of the Home Builder's Association of Lexington. The term of the Planning Commission member shall be the same as the member's Planning Commission appointment, and the term of the Council member shall be the same as the Council member's term. For the others, the initial appointment for one member shall be for four years, one for three years and one for two years. Subsequent appointments shall be for four years.

19-10(b) COMMISSIONER OF PUBLIC WORKS' REVIEW - All appeals from the decision of the Urban County Engineer shall be reviewed by the Commissioner of Public Works prior to filing with the Floodplain Appeals Committee. The Commissioner of Public Works may solicit additional technical or legal advice to assist in the review. The Commissioner of Public Works shall not be empowered to override the decision of the Urban County Engineer, but may refer the request back to the Urban County Engineer for reconsideration if the Commissioner's review uncovers new facts or information not considered in the original decision of the Urban County Engineer. However, if so desired, the appellant may file directly with the Floodplain Appeals Committee after the Commissioner has made the review. The Commissioner of Public Works shall document the review and recommendations in writing, and both the Commissioner's report and the report of the Urban County Engineer shall be required to be filed with any application to the Floodplain Appeals Committee appealing the Urban County Engineer's decision.

19-10(c) ORGANIZATION AND MEETINGS - The Floodplain Appeals Committee shall elect a chairman and any other officers deemed necessary, and shall keep records of its meeting and decisions. Meetings shall be held at the call of the chairman, or by the joint action of two members. In all cases, notice shall be given to all members at least six (6) days prior to any meeting. A quorum shall consist of three (3) members, and an appeal may be decided by a simple majority vote of two (2) members when a quorum is present.

19-10(d) DECISIONS AND RECORDING - In making its decision concerning a floodplain appeal, the Committee shall consider the factors listed in 19-12(e) of this Article. Every effort shall be made to complete the review and to render a decision within sixty (60) days of the submission of a completed application. However, failure to complete the review within the time period shall not constitute approval or denial of the special permit. The decision of the Floodplain Appeals Committee shall be forwarded to the Division of Building Inspection and to the Division of Engineering in order to be properly filed with the records of the property.

19-11 FLOODPLAIN VARIANCES - An activity needing a floodplain variance under the terms of this Article is defined as any proposed activity in a flood hazard area not considered as either a permitted use or special permit use in this ordinance. All requests for floodplain variances shall follow the same procedures as outlined above for an appeal of the Urban County Engineer's decision, and shall first include review of the request by the Urban County Engineer. Further review of a floodplain variance request shall be referred to the Floodplain Appeals Committee as established herein. The following shall apply to floodplain variance requests:

(a) Floodplain variances may be issued for the reconstruction, rehabilitation or restoration of historic structures, as defined herein, provided that the Committee finds that the floodplain variance is the minimum necessary so as to not destroy the historic character and design of the building; and that such reconstruction, rehabilitation or restoration will not result in the structure losing its historical designation.

(b) In its review of floodplain variance applications, the Committee shall consider all technical evaluations, all relevant factors, and all standards specified in other sections of this Article. In consideration of such factors and the purposes of this Article, the Committee may attach such conditions to the granting of floodplain variances as it deems necessary to further the purposes of this Article.

(c) Floodplain variances shall not be issued within any designated floodplain if any increase in flood levels during the regulatory flood would result.

(d) Floodplain variances shall only be issued upon a determination that the floodplain variance is the minimum necessary, considering the flood hazard, to afford relief.

(e) Floodplain variances shall only be issued upon a showing that the property has physical characteristics so unusual that complying with the requirements of this Article would create an exceptional hardship to the applicant or to the surrounding property owners. The characteristics must pertain to the land itself, and not the structure, its inhabitants or the property owners. Economic or financial hardship alone is not exceptional. Factors such as inconvenience, aesthetic considerations, physical handicaps (except as defined by the Americans with Disabilities Act), personal preferences, or the objections of other property owners in the vicinity do not qualify as an exceptional hardship. These problems may be resolved through other means without the granting of a variance, even if the alternative is more expensive, requires the property owner to build elsewhere, or to put he property to a different use than originally intended.

(f) A floodplain variance may only be issued upon a determination that the granting of a floodplain variance will not result in extraordinary public expense, create nuisance, cause fraud on or victimization of the public, or conflict with existing local laws or ordinances.

(g) Any applicant to whom a floodplain variance for a structure is granted shall be given written notice by the Division of Planning specifying the difference between the base flood elevation and the elevation to which the structure is to be built and stating that the cost of flood insurance will be commensurate with the increased risk resulting from the reduced lowest floor elevation.

19-12 COMMISSIONER OF PUBLIC WORKS' RESPONSIBILITIES - In addition to the responsibilities outlined above, the Commissioner of Public Works or authorized designee(s) shall have the responsibility to:

(a) Notify adjacent political jurisdictions and the Kentucky Department of Natural Resources, Division of Water, prior to any alteration of a watercourse, and submit evidence of such notification to the Federal Insurance Administration.

(b) Assure that maintenance is provided within the altered or relocated portion of said watercourse so that the flood carrying capacity is not diminished.

(c) Verify and record the actual elevation (in relation to mean sea level) of the lowest floor (including basement) ~~and the lowest opening~~ of all new structures and all additions to existing structures situated within a flood hazard area, where the base flood elevation is determined by means other than as a special flood hazard area.

(d) Verify and record the actual elevation (in relation to mean sea level) to which any new or substantially improved structure located within a special flood hazard area has been flood-proofed.

(e) When base flood elevation data have not been provided, then the Commissioner of Public Works shall obtain, review and reasonably utilize any base flood elevation data available from a federal, state or other source, in order to administer the provisions of this Article.

19-13 AREAS OF ALLUVIAL SOILS - When a building permit for new construction or substantial improvement to an existing structure is requested for a site where alluvial soils are found, and the site is not located in a Special Flood Hazard Area ~~or a post development floodplain~~, and where detailed hydrologic and hydraulic calculations have not been performed in conjunction with the development, the Division of Building Inspection shall refer the request to the Division of Engineering for review. These alluvial soils are identified in the Soil Survey, Fayette County, Kentucky, U.S. Department of Agriculture, Soil Conservation Service, 1968 and most specifically are as follows: Armour Silt Loam (ArA), when adjacent to a stream or other alluvial soil; Armour Silt Loam (ArB and ArC) when along the Kentucky River; Captina Silt Loam (CaA), Captina Silt Loam (CaB), Egam Silt Loam (Ea), Egam Silt Loam (Ec), Huntington Silt Loam (Hu), Lanton Silt Loam (La), Lawrence Silt Loam (Lc), Linside Silt Loam (Ld), Melvin Silt Loam (Mt), and Newark Silt Loam (Ne). In its review, the Division of Engineering may require the elevation of the lowest floor ~~and the lowest opening~~ of the structure to be not less than two (2) feet above the nearest regulatory flood elevation for the stream (as shown on the FEMA Maps), or not less than two (2) feet above any calculated or known high

water level that the Division of Engineering has on file for the watershed; or may require the submission of information prepared by a licensed professional engineer that the elevation is at least two (2) feet above the elevation of the regulatory flood and will not obstruct the floodplain or create adverse flooding conditions on adjacent properties. In addition, the Division of Building Inspection shall require the submission of a foundation and footer detail prepared by the private professional engineer prior to the issuance of the building permit. Appeals of the elevation requirements of the Division of Engineering shall be referred to the Floodplain Appeals Committee and shall follow the review procedure therein.

19-14 NON-CONFORMING USES - A structure which was lawfully constructed at an elevation below the elevation of the base flood before the passage or amendment of this ordinance, or the use of a structure or premises which lawfully commenced prior to the adoption or amendment to this Article, which is not in conformity with the provisions of this Article, may be continued so long as it remains otherwise lawful subject to the following conditions:

(a) No such use or structure shall be expanded, changed, enlarged or altered in a way which increases its non-conformity.

(b) No substantial improvement of any non-conforming structure shall be permitted, unless the structure is permanently changed to a conforming use.

(c) If any non-conforming use or structure is destroyed by any means, including but not limited to floods, to an extent of fifty percent (50%) or more of its value, it shall not be reconstructed except in conformity with the provisions of this Article.

(d) Any alteration, addition, or repair to any non-conforming structure which would result in substantially increasing its flood-damage potential shall be prohibited.

19-15 EXISTING STRUCTURES NOT NON-CONFORMING - Structures or uses which were lawfully constructed on fill, or elevated, so as to be at least one (1) foot above the regulatory flood elevation, shall be considered conforming uses.

19-16 ENFORCEMENT – The provisions of special use permits shall be enforced by the Divisions of Engineering and Building Inspection. Generally, the Division of Engineering shall determine compliance with elevation requirements and drainage features, and the Division of Building Inspection shall enforce structural requirements where flood-proofing of the structure is required. Minimum floor elevations shall be enforced through an elevation certificate, prepared by a registered land surveyor or a professional engineer, and submitted to the Division of Building Inspection after the elevation of the lowest **floor** ~~opening~~ is established and before any further work on the structure proceeds.