ARTICLE 4: OVERLAY ZONING DISTRICTS

SECTION 4.1: GENERALLY

4.1.1 Description, Standards, and Conflicts

(A) Overlay districts are supplemental to general zoning district classifications and are applied in combination to address special situations or to accomplish specific planning and land use goals.

(B) Unless otherwise expressly stated, all applicable regulations of the underlying district apply to property in an overlay district.

(C) Unless otherwise stated, all applicable standards of this Ordinance apply to property in an overlay district.

(D) When overlay district standards conflict with standards that otherwise apply in the underlying district, the regulations of the overlay district always govern.

SECTION 4.2: WATERSHED PROTECTION

4.2.1 Purpose and Intent

(A) The purpose of the Watershed Protection Overlay Districts is to prevent significant future water quality deterioration in existing or potential future drinking water reservoirs which receive stormwater runoff from land within Orange County.

(1) Protection of all water supplies within the State in accordance with minimum standards was mandated by NCGS §143-214.5.

(2) The quality of water in drinking water reservoirs can be affected by human activities including farming, construction of highways and roads, subdivision development, industrial development, and other land-disturbing activities. Types of water pollutants resulting from these activities include sediment, bacterial contamination, heavy metals, synthetic organic compounds and low-level radioactivity.

(B) The intent of the Watershed Protection Overlay Districts is to apply a set of regulations involving land use and, in some cases, structural best management practices which protect the watersheds by reducing the pollution from future development which enters drinking water supplies.

(1) Land use management practices involve minimum lot size and impervious surface restrictions, since impervious surfaces such as roads, roof tops and driveways are a major source of pollution.

(2) Structural best management practices allow for more intensive land use by providing for temporary detention of stormwater runoff so that pollutants may settle.

4.2.2 Applicability

(A) The Watershed Protection Overlay Districts as established herein overlay other zoning districts established in this Ordinance. The new use of any land or new structure within any Watershed Protection Overlay District shall comply with the use regulations applicable to the underlying zoning district as well as the requirements of the applicable Watershed Protection Overlay District.

(B) A Watershed Protection Overlay District shall be applied to the Orange County portion of watersheds which have been classified as WS-II, WS-III or WS-IV watersheds by the North Carolina Environmental Management Commission in its implementation of NCGS

§143-214.5. In accordance with the State Mandate, 13 Watershed Protection District Overlays, as listed in the table in subsection (D), are hereby established.

(C) Areas designated as "Critical Area" under the Orange County designation are hereby established using the following criteria:

(1) The land area in the Upper Eno watershed (straight line distance) within one-half mile of the normal pool elevation (NPE), or nearest available contour line used for the calculation, of an existing Class I or Class II reservoir or proposed water supply reservoir designated for protection, or the ridgeline of the sub-watershed, whichever is less; and

(2) The land area within one-half mile on each side for an upstream distance of 2.5 miles (straight line distance) of any fifth order or higher stream flowing into a Class I reservoir, or the ridgeline of the sub-watershed, whichever is less; and

(3) The land area within one-half mile on each side of a fourth order or higher stream flowing between any Class II and Class I reservoir; and

(4) The land area within one-half mile on each side for an upstream distance of 1.5 miles (straight line distance) of a third or fourth order stream flowing directly into any Class I reservoir; and

(5) The land area within one-half mile on each side for an upstream distance of 1.0 mile (straight line distance) of a third or fourth order stream flowing into a fourth order or higher stream that is within 1.0 miles (straight line distance) of a Class I reservoir; and

(6) Any isolated areas within the overall critical area boundary that drain into any of the streams listed above.

(7) Areas designated as Transition Areas on the Land Use Element Map of the Orange County Comprehensive Plan are excluded from designation as a Critical Area, except for land areas located within one-half mile from the normal pool elevation of a Class I reservoir.

(8) The land area north of the centerline of West Ten Road and west of the centerline of the Interstate 85/U.S. 70 Connector is excluded from designation as a Critical Area, except for land areas located within one-half mile from the normal pool elevation of a Class I reservoir.

(D) The designation of "Protected" applies to areas of watersheds classified as WS-II, WSIII, or WS-IV outside of areas designated as "Critical Area."

(E) General Locations of Watershed Protection Overlay Districts

TABLE 4.2.2.E: WATERSHED PROTECTION OVERLAY DISTRICTS

DISTRICT		GENERAL LOCATION
UNIV-CA	University Lake Critical Area	One-half mile from the normal pool elevation of University Lake, or to the ridgeline of the watershed, whichever is less.
UNIV-PW	University Lake Protected Watershed Overlay District	The portion of the drainage basin of University Lake not covered by UNIV-CA.
CANE-CA	Cane Creek Critical Area Overlay District	One-half mile from the normal pool elevation of Cane Creek Reservoir, or to the ridgeline of the watershed, whichever is less.
CANE-PW	Cane Creek Protected Watershed Overlay District	The portion of the drainage basin of Cane Creek Reservoir not covered by CANE-CA.
U-ENO-CA	Upper Eno Critical Area Overlay District	One-half mile from the normal pool elevation, or to the ridgeline of the watershed, whichever is less, of the following Class I reservoirs: Corporation Lake (538' actual NPE, 540' contour line used) and Lake Ben Johnson (515' NPE and contour line used). One-half mile (straight line measurement) from the normal pool elevation, or to the ridgeline of the watershed, whichever is less, of the following Class II

TABLE 4.2.2.E: WATERSHED PROTECTION OVERLAY DISTRICTS		
DISTRICT		**GENERAL LOCATION**
		reservoirs: Lake Orange (615' NPE and contour line used) and West Fork on the Eno (642' NPE, 642' contour line used); and the land area within one-half mile (straight line measurement) on each side of other streams designated for protection. These protected streams include portions of: Eno River, Seven Mile Creek, West Fork of the Eno River, East Fork of the Eno River, Rocky Run, Stream ID 1625, Stream ID 1498, Dry Run Creek, Crabtree Creek, and Stream ID 2109. (Source of elevation data: Atlantic Technologies Ltd., 1998 planimetric project approved by Orange County GIS).
U-ENO-PW	Upper Eno Protected Watershed Overlay	The portion of the Upper Eno drainage basin not covered by U-ENO-CA.
L-ENO-PW	Lower Eno Protected Watershed Overly	The Orange County portion of the Eno River Watershed within ten miles of the City of Durham Emergency Water Intake east of US 501 (Roxboro Road).
LITTLE-PW	Little River Protected Watershed Overlay District	The portion of drainage basin of the Little River Reservoir which is located in Orange County.
BACK-PW	Back Creek Protected Watershed Overlay District	The portion of the drainage basin of Back Creek which is located in Orange County.
HYCO-PW	South Hyco Creek Protected Watershed Overlay District	The portion of the drainage basin of South Hyco Creek which is located in Orange County.
FLAT-PW	Flat River Protected Watershed Overlay District	The portion of the drainage basin of the Flat River which is located in Orange County.
HAW-PW	Haw River Protected Watershed Overlay District	The portion of the drainage basin for the Haw River which is located in Orange County
JORDAN-PW	Jordan Lake Protected Watershed Overlay District	The Orange County portion of the Jordan Lake Watershed which extends five miles from the normal pool elevation of the impoundment.

(F) Existing Development

The following residential or non-residential structures shall be considered existing development for the purpose of determining compliance with or applicability of Sections 4.2 and 6.13.3, 6.13.4, 6.13.6, 6.13.8, 6.14.4, 6.14.10, 6.14.11, and 6.15.7(B)(3):

(1) Was either constructed prior to, or constructed in accordance with a valid building permit issued prior to, or was included as part of a Site Specific Development Plan approved by the Board of County Commissioners prior to January 1, 1994; or

(2) Was either constructed prior to, or constructed in accordance with a valid building permit issued prior to, or was included as part of a Site Specific Development Plan approved by the Board of County Commissioners prior to February 12, 1997 with respect to the Town of Hillsborough purchase of property associated with expanding the West Fork of the Eno reservoir; or

(3) Was either constructed prior to, or constructed in accordance with a valid building permit issued prior to, or was included as part of a Site Specific Development Plan approved by the Board of County Commissioners prior to October 19, 1999 with respect to the October 19, 1999 amendments related to the CANE-CA and CANE-PW districts, or

(4) Was either constructed prior to, or constructed in accordance with a valid building permit issued prior to, or was included as part of a Site Specific Development Plan approved by the Board of County Commissioners prior to September 19, 2001 with respect to the Stream Buffer/Usable Lot amendments, or

(5) Was either constructed prior to, or constructed in accordance with a valid building permit issued prior to, or was included as part of a Site Specific Development Plan approved by the Board of County Commissioners prior to May 20, 2003 with respect to the Stream Classification Amendments, or

(6) Had otherwise established a vested right under North Carolina Zoning law prior to January 1, 1994, or October 19, 1999 with respect to the October 19, 1999 amendments related to the CANE-CA and CANE-PW districts, or September 19, 2001 with respect to the Stream Buffer/Usable Lot amendments, or May 20, 2003 with respect to the Stream Classification Amendments.

(G) Existing development is hereby deemed to be conforming with respect to requirements of Sections 4.2, 6.13.3, 6.13.4, 6.13.6, 6.13.8, 6.14.4, 6.14.10, 6.14.11, and 6.15.7(B)(3) of this Ordinance. Periodic updates to FEMA maps may affect structures located within the special flood hazard area of specific streams.

(H) Redevelopment

(1) The rebuilding or replacement of residential or nonresidential structures which are defined as existing development according to subsection (F) above is allowed, provided that the rebuilding or replacement does not result in an increase in the amount of impervious surface, and does not encroach any farther into stream buffers or setbacks from reservoirs than the previous development.

(2) A structure which is rebuilt or replaced in accordance with these provisions is deemed conforming with respect to setbacks from streams and reservoirs required by Section 6.13 of this Ordinance.

(I) Existing Lots

(1) An existing lot, for the purpose of determining compliance with Sections 4.2 and 6.13.3, 6.13.4, 6.13.6, 6.13.8, 6.14.4, 6.14.10, 6.14.11, and 6.15.7(B)(3), is defined as:

(a) A lot which was created prior to January 1, 1994, or

(b) A lot within the Upper Eno watershed which was created prior to February 12, 1997 with respect to the Town of Hillsborough purchase of property associated with development of the West Fork on the Eno reservoir; or

(c) A lot within the Cane Creek watershed which was created prior to October 19, 1999, with respect to the October 19, 1999, amendments related to the CANE-CA and CANE-PW districts, or

(d) Non-conforming lots of record.

(2) Stream buffers as required by Section 6.13, and setbacks for septic systems as required by Section 4.2.9 may be reduced to the extent necessary to allow development of the lot, provided that all of the following criteria are met:

(a) The septic system is sized to serve no more than four bedrooms; and

(b) The septic tank, drainfield and repair area (where required) can be accommodated on 20,000 square feet of area or less; and

(c) The Orange County Planning Department, in consultation with Orange County Environmental Health and/or the Orange County Staff Engineer has determined that encroachment of the structure into the stream buffer and/or encroachment of the septic system or repair area into the stream buffer or reservoir setback is necessary in order to provide adequate area for septic disposal and repair while maintaining required separations between wells, septic systems, structures and property lines; and

(d) The Orange County Planning Department, in consultation with Orange County Environmental Health and/or the Orange County Staff Engineer, has determined that the relative locations of the well, septic system and structure maximize the amount of watershed protection that can be achieved while allowing development of the lot. Generally, an exception to setbacks for repair area is preferable to an exception for the initial septic system, and encroachment of structures or gravity septic systems into the setback is preferable to the installation of a septic system pump.

(e) The amount of encroachment into the stream or reservoir buffer is the minimum amount which can be obtained while meeting the criteria in (a) through (d).

4.2.3 Land Use Restrictions

All uses and activities allowed in the underlying zoning district are permitted with the following exceptions:

TABLE 4.2.3 LAND USE RESTRICTIONS

DISTRICT	RESTRICTIONS
UNIV-CA UNIV-PW CANE-CA U-ENO-CA	No new landfills are permitted. No commercial or industrial uses are permitted except for commercial development, in accordance with the provisions of the Ordinance, located within established Nodes as detailed within the Orange County Comprehensive Plan. No new golf courses are permitted
UNIV-CA CANE-CA U-ENO-CA	No residual (sludge/biosolids) application is permitted.
CANE-PW U-ENO-PW HYCO-PW LITTLE-PW BACK-PW FLAT-PW HAW-PW L-ENO-PW JORDAN-PW	No discharging landfills are permitted. Industrial use is limited to nonhazardous light industrial uses characterized by low water use (less than 10,000 gpd, excluding domestic water (25 gpd per employee) and water used for heating and air conditioning).

4.2.4 Residential Density

Maximum residential density shall be as indicated in the Table in this subsection, or as required by the underlying zoning district, whichever is less.

TABLE 4.2.4 RESIDENTIAL DENSITY

DISTRICT	MAXIMUM DENSITY
UNIV-CA UNIV-PW	1 du/five acres. Lots of record existing on October 2, 1989 may contain up to, but no more than, five lots with a density of one du/two acres. Contiguous lots of record existing on October 2, 1989 may be combined into one parcel for development. The number of two-acre lots and the total number of lots in the combined parcel cannot exceed the sum of the number of lots which could be created from each lot of record.
CANE-CA CANE-PW	1 du/ five acres Lots of record existing on October 19, 1999 may contain up to, but no more than, five lots as small as two acres in size. Contiguous lots of record existing on October 19, 1999 may be combined into one parcel for development. The number of two-acre lots and the total number of lots in the combined parcel cannot exceed the sum of the number of lots which could be created from each lot of record.

TABLE 4.2.4 RESIDENTIAL DENSITY	
DISTRICT	**MAXIMUM DENSITY**
U-ENO-CA LITTLE-PW	1 du / 2 acres
HYCO-PW FLAT-PW	1 du/ 40,000 square feet (.92 acre)
U-ENO-PW L-ENO-PW HAW-PW JORDAN-PW BACK-PW	Maximum density is as permitted in the underlying zoning district. Stormwater Control Measures (SCMs) are required in some cases where density exceeds 1 dwelling unit per acre. Refer to Section 4.2.5.

4.2.5 Impervious Surface Requirements for Residential Uses

TABLE 4.2.5.1: IMPERVIOUS SURFACE REQUIREMENTS (RESIDENTIAL)

DISTRICT	IMPERVIOUS SURFACE/DETENTION POND REQUIREMENTS (RESIDENTIAL)
UNIV-CA UNIV-PW	6% impervious surface limit. EXCEPT for all lots which existed prior to 4/2/90, which are subject to impervious surface limits as provided in the following Table (entitled Sliding Scale for Residential Impervious Surface Ratios – Univ, Cane, and Little). [1], [2] Lots shall either be a minimum of 2 acres in area, exclusive of any right-of-way or access easement, or created in accordance with established density regulations through the subdivision process to qualify for additional impervious surface allocation as detailed in Section 4.2.8 (C).
CANE-CA CANE-PW	6% impervious surface limit. EXCEPT for lots smaller than two acres which existed prior to 1/1/94, which are subject to impervious surface limits as provided in the following Table (entitled Sliding Scale for Residential Impervious Surface Ratios – Univ, Cane, and Little). [1], [2] Lots shall either be a minimum of 2 acres in area, exclusive of any right-of-way or access easement, or created in accordance with established density regulations through the subdivision process to qualify for additional impervious surface allocation as detailed in Section 4.2.8 (C).
U-ENO-CA	6% impervious surface limit. EXCEPT for lots smaller than five acres which existed prior to 6/1/2010, which are subject to impervious surface limits as provided in the following Table (entitled Sliding Scale for Residential Impervious Surface Ratios – Upper Eno). [1], [2]
LITTLE-PW	6% impervious surface limit. EXCEPT for lots which existed prior to 1/1/94, which are subject to impervious surface limits as provided in the following Table (entitled Sliding Scale for Residential Impervious Surface Ratios - Univ, Cane, and Little). [1], [2] Lots shall either be a minimum of 2 acres in area, exclusive of any right-of-way or access easement, or created in accordance with established density regulations through the subdivision process to qualify for additional impervious surface allocation as detailed in Section 4.2.8 (C).
FLAT-PW HYCO-PW	12% impervious surface limit for new and existing lots. [1], [2]
U-ENO-PW BACK-PW	12% impervious surface limit for existing and new lots outside of Transition Areas as designated in the Orange County Land Use Plan. [1], [2] 30% impervious surface limit for developments which exceed a density 1 du/acre within Transition Areas as designated in the Orange County Land Use Plan. Stormwater Management Plans (SMPs) and/or Stormwater Control Measures (SCMs) are required if impervious surface exceeds 12%. 70% impervious surface limit for residential uses developed at “high intensity” densities (R-5, R-8, and R-13) in an Economic Development District as designated in the Land Use Element of the Comprehensive Plan (high-density option) with SCMs if ISR exceeds12%.
L-ENO-PW	24% impervious surface limit with curb and gutter. 36% impervious surface limit without curb and gutter. [1], [2] 70% impervious surface limit for residential uses developed at “high intensity” densities (R-5, R-8, and R-13) in an Economic Development District as designated in the Land Use Element of the Comprehensive Plan (high-density option), with Stormwater Management Plans (SMPs) and/or Stormwater Control Measures (SCMs) required when impervious surface exceeds: 24% (w/ curb and gutter); or 36% (w/o curb and gutter).
HAW-PW JORDAN-PW	24% impervious surface limit. [1], [2]
[1] Allowable impervious surface area may be modified in accordance with Section 4.2.8 of the UDO. [2] Regardless of the proposed amount of impervious surface area, a Stormwater Management Plan (SMP) and/or Stormwater Control Measure (SCM) may still be required based on the proposed amount of land disturbance on a given parcel of property in accordance with applicable Orange County Erosion Control and State Stormwater regulations.	

(A) Hillsborough Economic Development District

(1) The Hillsborough Economic Development District is located within the Lower Eno - Unprotected watershed. Within the Hillsborough Economic Development District, as designated in the Land Use Element of the Comprehensive Plan, the maximum impervious surface ratio is 50% with detention ponds.

TABLES 4.2.5.2 & 4.2.5.3: SLIDING SCALE FOR RESIDENTIAL IMPERVIOUS SURFACE RATIOS – UNIV, CANE, LITTLE, AND UPPER ENO

LOT SIZE (ACRES)	ISR	SQUARE FEET		LOT SIZE (ACRES)	ISR	SQUARE FEET
Cells in black DO NOT apply to the Upper Eno						
6+	5.0			3.1	9.8	13,234
6.0	5.0	13,068		3.0	10.0	13,068
5.9	5.1	13,107		2.9	10.2	12,885
5.8	5.2	13,138		2.8	10.4	12,685
5.7	5.3	13,159		2.7	10.6	12,467
5.6	5.4	13,172		2.6	10.8	12,232
5.5	5.5	13,177		2.5	11.0	11,979
5.4	5.6	13,172		2.4	11.2	11,709
5.3	5.7	13,159		2.3	11.4	11,421
5.2.	5.8	13,138		2.2	11.6	11,116
5.1	5.9	13,107		2.1	11.8	10,794
5.0	6.0	13,068		2.0	12.0	10,454
4.9	6.2	13,234		1.9	12.2	10,097
4.8	6.4	13,381		1.8	12.4	9,723
4.7	6.6	13,512		1.7	12.6	9,331
4.6	6.8	13,625		1.6	12.8	8,921
4.5	7.0	13,721		1.5	13.0	8,494
4.4	7.2	13,880		1.4	13.2	8,050
4.3	7.4	13,861		1.3	13.4	7,588
4.2	7.6	13,904		1.2	13.6	7,109
4.1	7.8	13,930		1.1	13.8	6,612
4.0	8.0	13,939		1.0	14.0	6,098
3.9	8.2	13,930		0.9	14.2	5,567
3.8	8.4	13,904		0.8	14.4	5,018
3.7	8.6	13,861		0.7	14.6	4,452
3.6	8.8	13,800		0.6	14.8	3,868
3.5	9.0	13,721		0.5	15.0	3,267
3.4	9.2	13,625		0.4	15.2	2,648
3.3	9.4	13,512		0.3	15.4	2,012
3.2	9.6	13,382		0.2	15.6	1,359

4.2.6 Impervious Surface and Lot Size Requirements for Non-Residential Uses

Unless otherwise noted in the Table below, minimum lot sizes shall be in conformance with the underlying zoning district.

TABLE 4.2.6: IMPERVIOUS SURFACE REQUIREMENTS (NON-RESIDENTIAL)	
DISTRICT	**IMPERVIOUS SURFACE/DETENTION POND REQUIREMENTS (NON-RESIDENTIAL)**
UNIV-CA CANE-CA	5-acre minimum lot size, with potential of up to five lots as small as two acres for lots of record September 1, 2015 (University Lake) or October 19, 1999 (Cane Creek); AND 6% impervious surface limit. [1], [2]
U-ENO-CA	2-acre minimum lot size AND 6% impervious surface limit. [1], [2]
UNIV-PW CANE-PW	5-acre minimum lot size with potential of up to five lots as small as two acres for lots of record September 1, 2015 (University Lake) or October 19, 1999 (Cane Creek); AND 50% ISR for all fire stations and solid waste collection centers; AND 12% ISR for all other non-residential uses; AND on-site infiltration of the first inch of stormwater runoff; AND a limit of 1.0% of the watershed for non-residential use (139 acres in CANE-PW). [1], [2]
LITTLE-PW	2-acre minimum lot size AND 50% ISR for all fire stations and solid waste collection centers; AND 12% ISR for all other non-residential uses; AND on-site infiltration of the first inch of stormwater runoff; AND a limit of 1.0% of the watershed for non-residential use (406 acres in LITTLE-PW). [1], [2]
U-ENO-PW BACK-PW	70% ISR in Economic Development, Commercial and/or Commercial- Industrial Nodes as designated in the Land Use Element of the Comprehensive Plan (high-density option) with Stormwater Management Plans (SMPs) and/or Stormwater Control Measures (SCMs) if ISR exceeds 12%; AND 50% ISR for all fire stations and solid waste collection centers outside of Commercial and/or Commercial-Industrial Nodes as designated in the Land Use Element of the Comprehensive Plan, with Stormwater Management Plans (SMPs) and/or Stormwater Control Measures (SCMs) if ISR exceeds 12%; AND 12% ISR for all other non-residential uses outside of Commercial and/or Commercial-Industrial Nodes as designated in the Land Use Element of the Comprehensive Plan; AND on-site infiltration of the first inch of stormwater runoff; AND A limit of 1,151 acres of non-residential use throughout U-ENO-PW (5.0%) and 163 acres throughout BACK-PW (1%). [1], [2]
HYCO-PW FLAT-PW	50% ISR for all fire stations and solid waste collection centers; AND 12% ISR for all other non-residential uses; AND on-site infiltration of the first inch of stormwater runoff;AND limit of 1% of the watershed for non-residential use (37 acres in HYCO-PW, 66 acres in FLAT-PW). [1], [2]
L-ENO-PW	70% impervious surface, with structural SCMs required when impervious surface exceeds: 24% (w/ curb and gutter); or 36% (w/o curb and gutter). [1], [2]
HAW-PW JORDAN-PW	24% impervious surface limit. [1], [2]
[1] Allowable impervious surface area may be modified in accordance with Section 4.2.8 of the UDO. [2] Regardless of the proposed amount of impervious surface area, a Stormwater Management Plan (SMP) and/or a Stormwater Control Measure (SCM) may be required in accordance with applicable local and State standards based on proposed land disturbance and/or a project exceeding impervious surface thresholds as identified herein. NOTE: Non-residential use impervious acreage limits in watershed with such limits are calculated using the actual amount of impervious surface for non-residential uses throughout the watershed, not by the overall number of acres of non-residential parcels located in a particular watershed.	

(A) Hillsborough Economic Development District

(1) The Hillsborough Economic Development District is located within the Lower Eno - Unprotected watershed. Within the Hillsborough Economic Development District, as designated in the Land Use Element of the Comprehensive Plan, the maximum impervious surface ratio is 50% with Stormwater Control Measures (SCMs).

4.2.7 Placement of Streets, Driveways, and Buildings

(A) Streets, driveways, and buildings or other structures shall be located, to the extent reasonably possible, so as to take full advantage of the absorptive capacity of the soils on which they are to be situated and to avoid the following environmentally sensitive areas:

(1) Stream buffer zones as required by Section 6.13;

(2) Wetlands as defined by the U.S. Army Corps of Engineers;

(3) Land with slopes greater than 15%; and

(4) Natural areas as identified in the Inventory of Natural Areas and Wildlife Habitats of Orange County, NC.

(B) To avoid creating lots that will be difficult to build upon in compliance with the standards of this Section, the preliminary plan shall show proposed building envelopes and approximate driveway locations for all lots within subdivisions.

(1) A zoning compliance permit shall not be issued for the construction of buildings or driveways outside the areas so designated on the preliminary plan unless the Planning Director makes a written finding that the proposed location complies with the provisions of this Section and Sections 6.13 (Stream Buffers) and 6.14 (Stormwater Management).

4.2.8 Modifications of the Impervious Surface Ratio

Modifications of the Impervious Surface Ratios may be requested through one of the following provisions:

(A) Through variance procedures of the Board of Adjustment, as described in Section 2.10.

(B) Through approval and recordation of a conservation agreement, as provided in Article 4 of Chapter 121 of the N.C. General Statutes, between Orange County and a land owner that prohibits development of land in a protected watershed in perpetuity, subject to the following:

(1) A modification of the required impervious surface ratios may be approved administratively but only to the extent that additional land in the same watershed is conserved or protected from development.

(2) The land which will be subject to a conservation agreement must be adjacent to the land proposed for development and for which a modification of the impervious surface ratios is sought.

(a) As an example, a person owning a 40,000 square foot lot and subject to a 12% impervious surface ratio would be limited to 4,800 square feet of impervious coverage. If the person's plans called for 5,500 square feet of coverage (a difference of 700 square feet), the recording of a conservation easement on 5,833 square feet of contiguous property would satisfy the impervious surface ratio requirements. (12% of 5,833 square feet is 700 square feet.)

(b) The conservation easement shall describe the property restricted in a manner sufficient to pass title, provide that its restrictions are covenants that run with the land and, be approved in form by the County Attorney.

(c) The conservation easement shall, upon recording, be in the place of a first priority lien on the property (excepting current ad valorem property taxes) and shall remain so unless, with the approval of Orange County, it is released and terminated.

(d) Orange County shall require the priority of the conservation easement to be certified by an attorney-at-law, licensed to practice law in the State of North Carolina and approved to certify title to real property.

(e) Orange County approval of a release or termination of the conservation agreement shall be declared on the document releasing or terminating the agreement. The document shall be signed by the Orange County Manager, upon approval of the Board of County Commissioners. No such document shall be effective to release or terminate the conservation agreement until it is filed for registration with the Register of Deeds of Orange County.

(C) Through approval (by Orange County) and recordation (by the land owner(s)) of a Declaration of Impervious Surface Re-Allocation form (provided by Orange County) and a corresponding scaled exhibit map. The Declaration of Impervious Surface Re-Allocation form and corresponding scaled exhibit map must clearly describe the proposed site modifications, inclusive of the allowable impervious area(s) for each affected lot (in square feet), the amount of existing impervious area(s) for each affected lot (in square feet), and the amount of proposed impervious area(s) to be permanently added and/or removed for each affected lot. The applicant must provide evidence that the proposed impervious surface re-allocations are within the same watershed and within the same tier of that watershed (e.g. critical, protected, unprotected).

(D) Through the installation of a Stormwater Control Measure (SCM), consistent with the minimum design standards as detailed within the most current version of the North Carolina Administrative Code Title 15A, Subchapter 02H, Sections .1000 through .1062 and the most current version of the Department of Environmental Quality (NCDEQ) Stormwater Design Manual, and this Ordinance.

(1) The proposed feature must be recognized by Orange County and the State as allowing for an increase in impervious surface area through an Infiltration System.

(2) Under no circumstances may impervious surface area be increased by more than 3% of the total allowable area on the subject parcel through this process.

(3) The property owner shall provide a stormwater assessment, completed by a licensed engineer, of the current property identifying its infiltration rates and carrying capacity as well as a comprehensive soil assessment for the property.

(4) The development/design of the feature shall be in accordance with established design criteria as embodied within the most current version of the North Carolina Administrative Code Title 15A, Subchapter 02H, Sections .1000 through .1062 and the most current version of the NCDEQ Stormwater Design Manual and shall be completed by a licensed engineer with expertise in stormwater management. Additional allowable impervious surface area shall be based on the soil composition of the property consistent with State regulations.

(5) The property owner shall be responsible for the completion and submission of a stormwater operation/maintenance and access agreement detailing the perpetual maintenance, inspection, and upkeep of the approved SCM in accordance with Orange County and State regulations.

The Planning Director shall cause an analysis to be made of the agreement by qualified representatives of Orange County and other agencies or officials as appropriate. Once approved, the document shall be recorded at the Orange County Register of Deeds office.

The property owner assumes all financial and legal responsibility for the perpetual maintenance and upkeep of the approved SCM.

(6) The property owner shall assume all costs associated with the preparation and recordation of new plat(s)/development restrictions detailing the allowable impervious surface limit(s) for the property after the SCM has been approved by Orange County.

(7) The property owner, at its cost and expense, shall be required to execute and file with Orange County a Performance Guarantee to cover the cost of removal of a SCM, and any additional impervious surface area installed as the result of its approval, in the event the SCM is failed to be maintained in accordance with the recorded operations agreement. The Performance Guarantee shall comply with the provisions of Section 6.22 of this Ordinance.

4.2.9 Water Supply / Sewage Disposal Facilities

TABLE 4.2.9: WATER SUPPLY/SEWAGE DISPOSAL FACILITIES

DISTRICT	WATER SUPPLY/SEWAGE DISPOSAL
UNIV-CA UNIV-PW	Water supply and sewage treatment systems shall be limited to individual wells and on-site septic tanks systems or individual on-site alternative disposal systems. No off-site systems shall be permitted.
All Other Watershed Overly Districts	For parcels created through the Conventional Subdivision process as detailed in Article 7 of this Ordinance septic and repair area shall be located in lot. Off-site individual septic systems associated with parcels created through the Flexible Development Subdivision as outlined in Section 7.12 of this Ordinance must be contained within Common Open Space and approved by the Orange County Environmental Health Department.
UNIV-CA	New septic tanks and their nitrification fields shall be located outside of any stream buffers, or 300 feet from a reservoir or perennial or intermittent stream as shown on the USGS Quadrangle maps, whichever is further
CANE-CA U-ENO-CA	New septic tanks, pump tanks and their appurtenances shall be located outside of any stream buffers and at least 100 feet from a perennial or intermittent stream as shown on the USGS Quadrangle maps, and at least 150 feet from a reservoir. New nitrification fields shall be located outside of any stream buffers and at least 100 feet from a perennial or intermittent stream as shown on the USGS Quadrangle maps, and at least 300 feet from a reservoir.
CANE-PW CANE-CA U-ENO-CA	Water supply and sewage treatment systems shall be limited to individual wells and septic tanks or individual on-site alternative disposal systems; provided however, off-site systems shall be permitted when located in a Flexible Development subdivision approved in accordance with Section 7.13 of this Ordinance.
UNIV-PW CANE-PW U-ENO-PW HYCO-PW LITTLE-PW BACK-PW HAW-PW JORDAN-PW L-ENO-PW FLAT-PW	New septic tanks and their nitrification fields shall be located outside of any stream buffers and at least 100 feet from a perennial or intermittent stream as shown on the USGS Quadrangle maps.

4.2.10 Orange County Watershed Matrix

Table 4.2.10 defines the land disturbance area thresholds (in square feet) that trigger the need for an Erosion & Sedimentation Control Plan and/or a Stormwater Management Plan.

TABLE 4.2.10: ORANGE COUNTY WATERSHED MATRIX

WATERSHED			EROSION CONTROL (OC UDO)	STORMWATER (15A NCAC 02B .0265 Jordan Rules; 15A NCAC 02B .0277 Falls Rules)		NUTRIENTS	
				Other	*SFH / Duplex or Recreational*	*N*	*P*
CAPE FEAR	Haw River Arm	Back Creek	20,000	21,780	43,560	**NA	**NA
		Haw Creek	20,000	21,780	43,560	**NA	**NA
		Cane Creek	*10,000	21,780	43,560	**NA	**NA
		Cane Creek Critical Area	*10,000	21,780	43,560	**NA	**NA
		Haw River (protected)	20,000	21,780	43,560	**NA	**NA
		Haw River (unprotected)	20,000	21,780	43,560	**NA	**NA
	U New Hope Arm	Jordan Lake (unprotected)	20,000	21,780	43,560	**NA	**NA
		Jordan Lake (protected)	20,000	21,780	43,560	**NA	**NA
		University Lake	*10,000	21,780	43,560	**NA	**NA
		University Lake Critical Area	*10,000	21,780	43,560	**NA	**NA
NEUSE	Falls Lake	Flat River	20,000	12,000	21,780	2.2	0.33
		Little River	20,000	12,000	21,780	2.2	0.33
		Upper Eno	*10,000	12,000	21,780	2.2	0.33
		Upper Eno Critical Area	*10,000	12,000	21,780	2.2	0.33
		Lower Eno (unprotected)	20,000	12,000	21,780	2.2	0.33
		Lower Eno (protected)	20,000	12,000	21,780	2.2	0.33
ROANOKE		Hyco Creek	20,000	NA	NA	NA	NA
		South Hyco Creek	20,000	43,560	43,560	NA	NA

***Waiver required.**
****Jordan Lake nutrient export regulations are not currently enforced, in compliance with State mandate. Orange County will resume enforcement of nutrient export regulations if/when the State mandate is revised.**

NOTES:
[1] Thresholds are listed in square feet (SF).
[2] Not part of larger development.
[3] Nutrients listed in pounds/acre/year.
[4] 43,560 square feet = 1 acre.
[5] 21,780 square feet = ½ acre.
[6] 10,890 square feet = ¼ acre.
[7] A site plan may also be constrained by stream buffer requirements and impervious surface limitations, in addition to typical zoning setback requirements.