



RADWAY
DESIGN
ASSOCIATES
CHAPEL HILL, NC

Memorandum

To: Chapel Hill Town Manager
From: Scott Radway, AICP
Date: November 6, 2008
Subject: Aydan Court - Disturbed Site Area Analysis

In response to the questions and information requests by the Chapel Hill Town Council, we have analyzed disturbance for both the RCD and non-RCD portions of the site. This information is summarized for both portions of the site in Table 1.

A. Disturbance in Non-RCD Portion of Site

The LUMO standards for the non-RCD portion of the site permits disturbance of 4.28 acres.

(1) The Aydan Court site plan will disturb 3.65 acres - 85% of the area allowed to be disturbed.

B. Disturbance in RCD Portion of Site

The LUMO standards for the RCD portion of the site permits disturbance of 12,176 SF.

(1) The Aydan Court site plan will disturb 7,358 SF – 41.7% of the area allowed to be disturbed.

C. Applicant Comment

The Aydan Court site plan meets the LUMO standards with respect to the amount of total site disturbance permitted in both the RCD and non-RCD portions of the site.

Table 1
Summary of Permitted and Proposed Site Disturbance in Square Feet¹

Gross Lot Area	RCD Portion of Site	Non RCD Portion of Site	Total Site
Total SF	53,897	200,282	254,180
Permitted Disturbance	12,176	186,432	198,608
Proposed Disturbance	7,358	159,257	166,615
Proposed Disturbance as per- cent of permitted disturbance.	41.7 %	85.4 %	83.8 %
Proposed Disturbance as percent of Gross Lot Area.	13.6 %	79.5 %	65.5 %

¹ Source – Data as calculated for Table 2 and Table 4



Disturbance Permitted in RCD - Discussion

The Intermittent Stream RCD area on the Ayden Court site is within the “Stream Side Zone” as defined in the LUMO. The two smaller RCD areas associated with the off-site 100-year flood elevation are in the “Upland Zone,” because they are more than 100 feet from the Upper Little Creek Stream.

Within the “Stream Side Zone” the LUMO (*Table 3.6.3-3 Dimensional Regulations in RCD*) development is permitted to disturb 20% of the RCD area. In the Upland Zone, 40% disturbance is permitted.

Table 2
Permitted Disturbance in RCD Portions of Site²

	Intermittent Stream “Stream Side RCD”	“Upland RCD”	RCD Areas Total for Site
Total SF	46,912 SF	6,985 SF	53,897 SF
20% Permitted Disturbance	9,382 SF	-	
40% Permitted Disturbance	-	2,794 SF	
Total Permitted Disturbance	9,382 SF	2,794 SF	12,176 SF
Proposed Disturbance	7,358 SF	0 SF	7,358 SF
% Of Disturbance Permitted in RCD			41.7 %
% Of RCD Disturbed			13.6 %

Site Disturbance Outside the RCD – Areas Regulated

Two LUMO standards could affect the amount of area permitted to be disturbed.

A. Landscape Buffers – Property Lines and Street Line

LUMO *Section 5.6.2.(b) Buffers Required* establishes that no buffer is required for development within the R-SS-C District.

“Where the proposed development site is located in a Residential-Special Standards-Conditional zoning district, no buffer shall be required.”

² Source – Aydan Court Site Plan and Aydan Court Fact Sheet and LUMO standards



Thus for the purpose of answering the question asked by Council about the amount of on-site disturbance proposed vs. that permitted in areas outside the RCD, there are no regulatory buffer areas to be removed from the calculation of total area that can be disturbed.

B. Steep Slope Areas – Standards for development on slopes 25% or greater.

LUMO slope regulations governing disturbance are in Table 3 below.

Table 3
(LUMO Table 5.3-1 Slope Construction Restrictions).

Slope Category	Development Restrictions
Slope less than 10%	No additional building restrictions pursuant to this Section.
Slopes 10-15%	Site preparation techniques shall be utilized which minimize grading and site disturbance
Slopes greater than 15% less than 25%	Building and site preparation may occur upon demonstration of specialized site design techniques and approaches as described in subsection (d)
Slopes 25% or higher	Generally unsuitable for development. <i>Land disturbance shall not exceed 25% of the area containing 25% or greater slopes unless a variance is granted by the Board of Adjustment.</i> For disturbed areas, building and site preparation shall utilize specialized site design techniques and approaches as described in subsection (d).

- Based upon this LUMO table, Aydan Court has the right to disturb 4,617 SF of land in the non-RCD portion of the site with 25% or greater slopes.
- The amount of steeply sloped land that may not be disturbed without approval by the Board of Adjustment or Town Council when it approves a Special Use Permit is 13,850 SF.



Disturbance calculations for the non-RCD portion of the Aydan Court site.

Based upon the LUMO standards, the Aydan Court site plan is permitted to disturb 4.28 acres in the non-RCD portion of the site.

As tabulated in Table 4, the plan proposes disturbance of 3.65 acres or 85% of this area.

Table 4
Non-RCD Site Disturbance Permitted - Proposed³
In Square Feet

	Non-RCD Part of Site in Square Feet	Non-RCD Part of Site in Acres
Total Area – Non RCD	200,282	4.60
Steep Slope Limitation	(13,850)	
Permitted Disturbance	186,432	4.28
Proposed Disturbance	159,257	3.65
Proposed Disturbance as percent of permitted disturbance.	85.4 %	85.4 %
Proposed Disturbance as percent of total non-RCD area.	79.5 %	79.5 %

³ Source – Aydan Court Site Plan and Aydan Court Fact Sheet and LUMO standards