

# Erosion Control Plan Narrative

FOR REZONING OF

## Aydan Court Chapel Hill, NC

Prepared for:  
CAZCO, Inc.

Prepared By:



ENGINEERING & SURVEYING

1709 Legion Road, Suite 201  
Chapel Hill, NC 27517

January 21, 2009

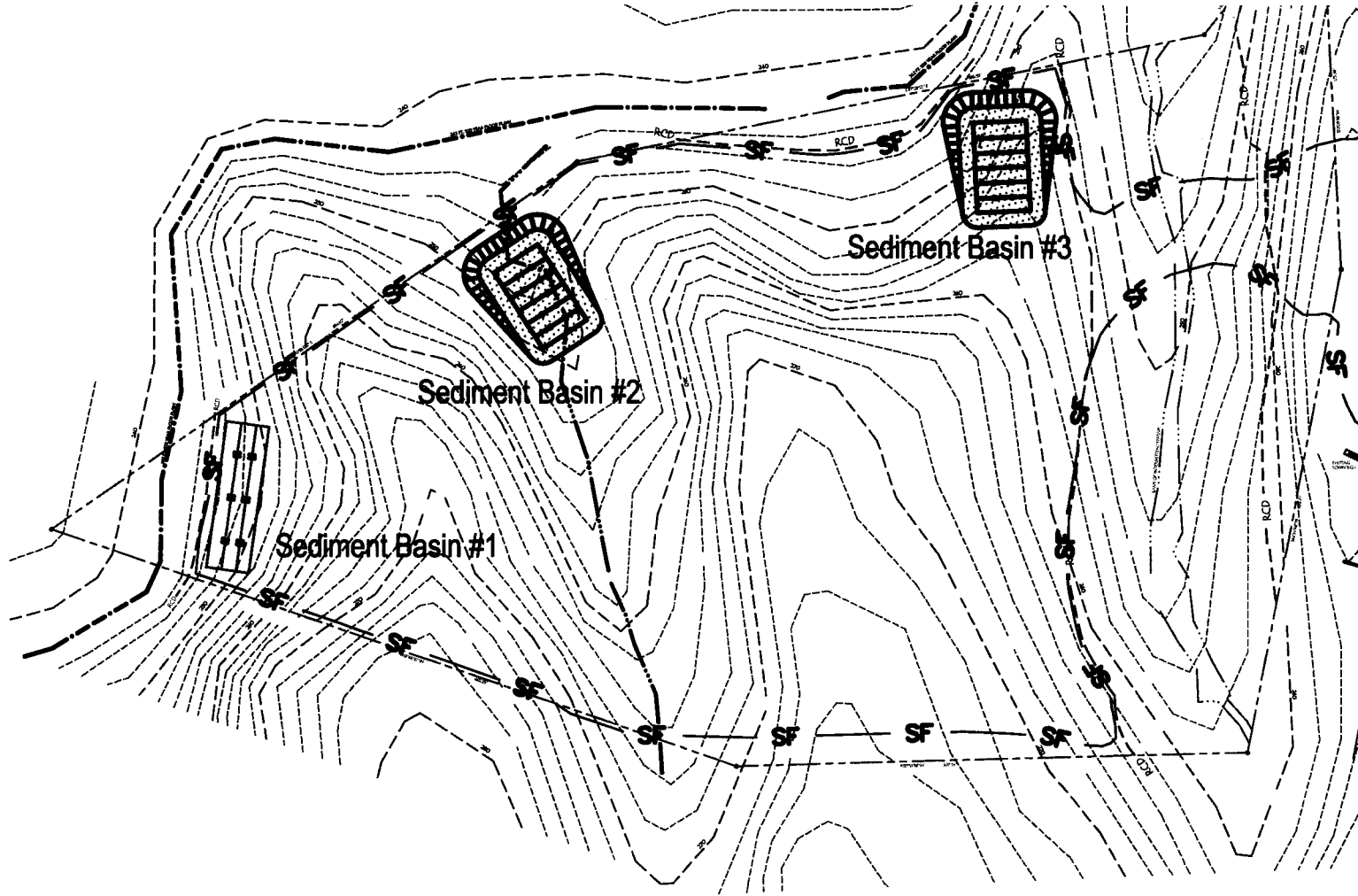
## **Narrative**

Orange County has a comprehensive Soil Erosion and Sedimentation Control Ordinance which was just updated on October 23, 2007. The Erosion Control Department administers this ordinance, reviews plans, issues land disturbance permits, and inspects sediment control measures during construction.

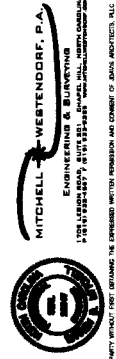
The Aydan Court parcel is 5.8 acres. To construct Aydan Court, 3.8 acres of the site will be cleared. Silt fence will be installed to identify the clearing limit and control sediment runoff. There are 2 erosion control plans to address the sequence of construction of Aydan Court. The following applies to any project. When a project is cleared, the stormwater runoff follows natural drainage pattern to the lowest points and exits the site. On the phase 1 erosion control plan, we placed sediment basins at these lowest points of the site. There will always be small areas where a sediment basin is not appropriate such as where we cross the intermittent stream with the entry road. In these locations, we use silt fence but may add a second line of silt fence to further protect the intermittent stream from sediment. The three basins shown on the phase 1 plan will capture the stormwater runoff from the 3.8 acres of disturbance so the contractor can clear the site and start earthwork operations (cut and fill).

The phase 2 plan shows basin 2 being removed. As the site is brought to grade, the drainage patterns change. Stormwater runoff is redirected by the sitework operations and by adding storm pipes and inlets. Sediment Basin 2 will be removed when the stormwater is redirected to sediment basin 3. Sediment Basin 3 will be sized to handle the phase 2 drainage area.

The developer, contractor and design team has considered ways to control sediment on site and prevent sediment from leaving the site during construction. We are aware that Orange County has a progressive Soil Erosion and Sedimentation Control Ordinance but we wanted to provide measures that would go beyond the protection afforded by the ordinance. The Orange County Soil Erosion and Sedimentation Control Ordinance requires sediment basins to be sized to manage the 10-year storm event. The developer has decided to increase the size of the sediment basins and size them to manage the 50-year storm event. It will require the sediment basins to be oversized approximately 25-30% to contain the 50-year storm event. Most sediment removal on a construction site is done by the sediment basins. It is also widely know that the smaller suspended soil particles can only be removed by settling out of solution which is done in the sediment basin.



EROSION CONTROL PLAN PHASE 1 JANUARY 16, 2009

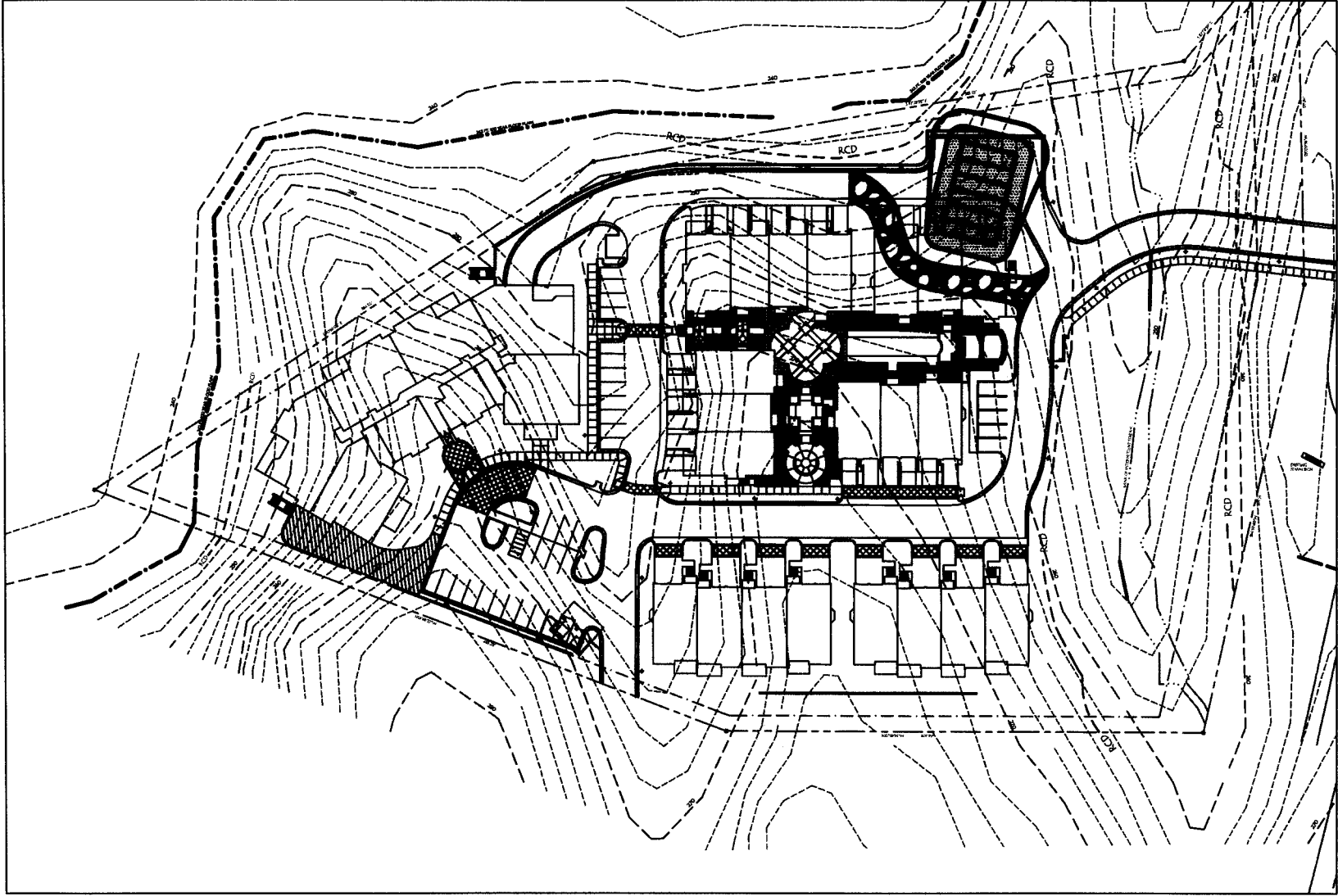


Developer: CAZCO, Inc.  
**Aydan Court Townhomes  
 & Condominiums**  
 N.C. Highway 54 - Chapel Hill, North Carolina

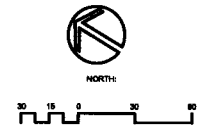
NO.	DATE	BY	DESCRIPTION
1	1/16/09	AW	Initial Design Plan
2			
3			
4			
5			
6			
7			
8			
9			
10			

EROSION

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EROSION CONTROL PLAN PHASE 2 JANUARY 16, 2009



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Developer: CAZCO, Inc.  
**Aydan Court Townhomes  
 & Condominiums**  
 N.C. Highway 54 - Chapel Hill, North Carolina

NO.	DESCRIPTION	DATE
1	Prepared	1/16/09
2	Revised	
3	Revised	
4	Revised	
5	Revised	
6	Revised	
7	Revised	
8	Revised	
9	Revised	
10	Revised	
11	Revised	
12	Revised	
13	Revised	
14	Revised	
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30	Revised	

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