

Stormwater Exceptional Design Project Narrative

Westprong Ph-II
Wilmington, NC

Westprong Ph-II is an existing 2.65 acre tract located in Wilmington, NC. The tract is currently occupied by two single family residences and is bordered by Wrightsville Ave. to the South, a horse farm to the West, Bradley Creek to the North, and Westprong Ph-I to the East. The site proposes 7 one bedroom duplexes (14 units), with a total of 32,549 s.f. of impervious surfaces. This includes: 12,096 s.f. of Proposed Building, 3,059 s.f. of proposed sidewalk, and 17,394 s.f. proposed parking/drive area. Stormwater runoff from this site will be treated by an on-site Wet Detention Basin to meet the 1.5" storage requirement and the 25yr Pre-Post Peak development rate. Runoff from the site is discharged to Bradley Creek, classification SC;HQW Index# 18-87-24-4-(2), in the Cape Fear river basin.

Exceptional Design parameters need to be met for area of site located with-in the Watershed Resource Protection (WRP) and Conservation Area (CA). Our base impervious area in the WRP is 30.75%, requiring us to meet the 10 point criteria found in Table 2 (Density Allowances for Exceptional Development Projects). Please see below calculations showing how this project meets Exceptional Development Practices.

Summary of Points claimed

Points required for 6.2 du/ac.	60
Points claimed:	
• Preservation of Wetlands	20
• 35' Vegetated Wetland Buffer	10
• 5/10/25 Year Storm design	10
• 90% TSS Removal	10
• 50% Xeric Landscaping	15
Total points claimed:	65

**All existing wetlands for this project are proposed to be preserved.*

**35' Vegetated buffer is provided in accordance with City of Wilmington ordinance.*

**Stormwater facility is designed to meet the NCDEQ BMP Manual and maintain Pre-development design for the 5/10/25yr storms.*

**90% TSS Removal. This has been achieved through a proposed Wet Detention Basin designed to meet the 90% TSS Removal requirement.*

**50% of proposed landscape species to be considered drought tolerant.*

8/23/2016

PN 2015-044

Impervious Surfaces

Total site area:	115,619 sf
Prop. Buildings	12,096 sf
Prop. Sidewalk	3,059 sf
Prop. Pavement	<u>17,394 sf</u>
Total impervious surfaces:	32,549 sf
Net percent of site:	39.35 %