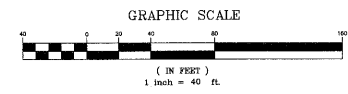
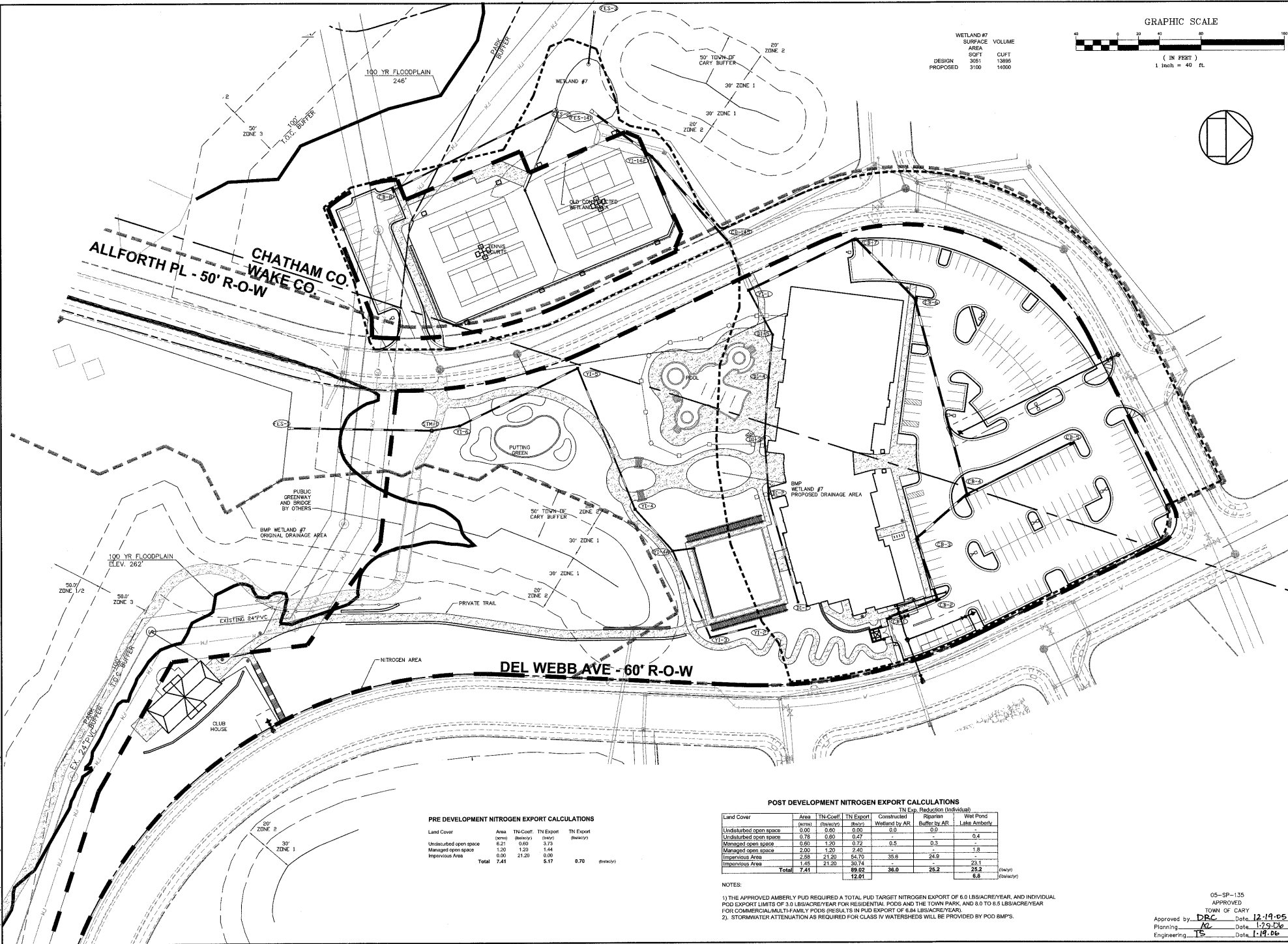


V:\Projects\Sells Projects\05-4029 Amberly AR Carolina Preserve Rec Center\DRAWINGS\PROJECT DRAWINGS\05-4029 C2.1 Nitrogen Control Plan.dwg 12/23/2005 3:28:18 PM EST



WETLAND#7	SURFACE AREA	SOFT VOLUME	CLIFT
DESIGN	3051	13885	
PROPOSED	3100	10000	

CHAS. H. SELLS, INC.
 Consulting Engineers, Surveyors & Photogrammetrists
 15401 Weston Parkway
 Suite 100
 Cary, NC 27513
 Tel: 919-678-0215
 Fax: 919-678-0205
 www.chasells.com



RELEASED FOR CONSTRUCTION

AMBERLY AR RECREATION CENTER
 CARY, NORTH CAROLINA

REVISIONS

NO.	DESCRIPTION

PROJECT #: 05-4029 DATE: 11/03/05
 DRAWN BY: CD CHECKED BY: ET
 TITLE: NITROGEN CONTROL PLAN
 SHEET: C2.1

PRE DEVELOPMENT NITROGEN EXPORT CALCULATIONS

Land Cover	Area (acres)	TN Coeff. (lb/acre)	TN Export (lb/yr)	TN Export (lb/acre/yr)
Undisturbed open space	6.21	0.60	3.72	0.60
Managed open space	1.20	1.20	1.44	1.20
Impervious Area	0.00	21.20	0.00	0.00
Total	7.41		5.17	0.70

POST DEVELOPMENT NITROGEN EXPORT CALCULATIONS

Land Cover	Area (acres)	TN Coeff. (lb/acre)	TN Export (lb/yr)	TN Export Reduction (lb/acre/yr)		
				Constructed Wetland by AR	Riparian Buffer by AR	Wet Pond Lake Ambergly
Undisturbed open space	0.00	0.60	0.00	0.0	0.0	0.4
Undisturbed open space	0.78	0.60	0.47			
Managed open space	0.00	1.20	0.72	0.5	0.3	1.8
Managed open space	2.00	1.20	2.40			
Impervious Area	2.88	21.20	61.70	35.8	24.9	23.1
Impervious Area	1.45	21.20	30.74			25.2
Total	7.41		89.02	36.0	25.2	6.6

NOTES:
 1) THE APPROVED AMBERLY PUD REQUIRED A TOTAL PUD TARGET NITROGEN EXPORT OF 6.0 LBS/ACRE/YEAR, AND INDIVIDUAL PUD EXPORT LIMITS OF 3.0 LBS/ACRE/YEAR FOR RESIDENTIAL PUDS AND THE TOWN PARK, AND 0.0 TO 8.6 LBS/ACRE/YEAR FOR COMMERCIAL/MULTI-FAMILY PUDS (RESULTS IN PUD EXPORT OF 8.84 LBS/ACRE/YEAR).
 2). STORMWATER ATTENUATION AS REQUIRED FOR CLASS IV WATERSHEDS WILL BE PROVIDED BY PUD BMPS.

05-SP-135
 APPROVED
 TOWN OF CARY
 Approved by: **DEC** Date: **12-19-05**
 Planning: **AC** Date: **12-9-05**
 Engineering: **TS** Date: **1-19-06**