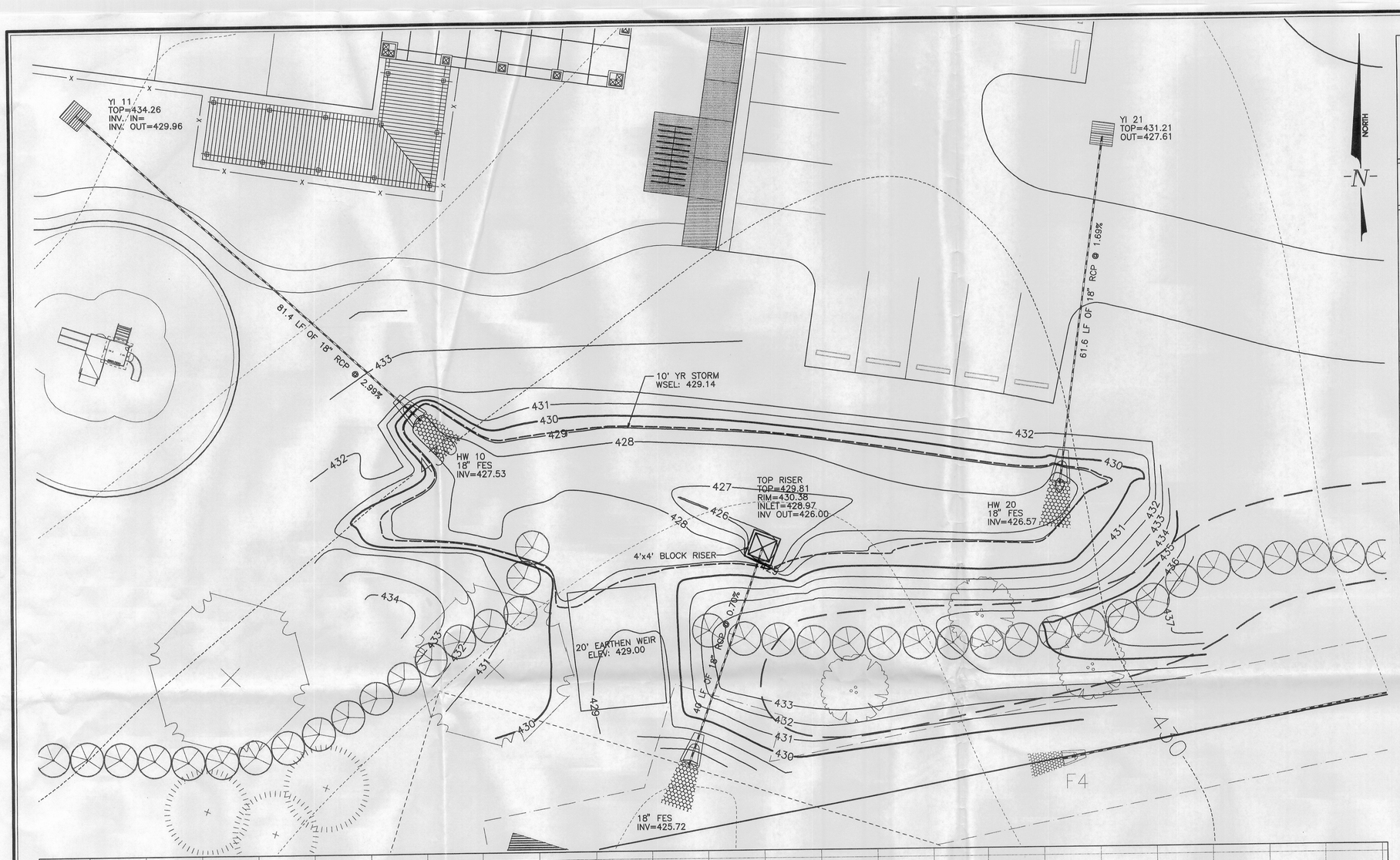
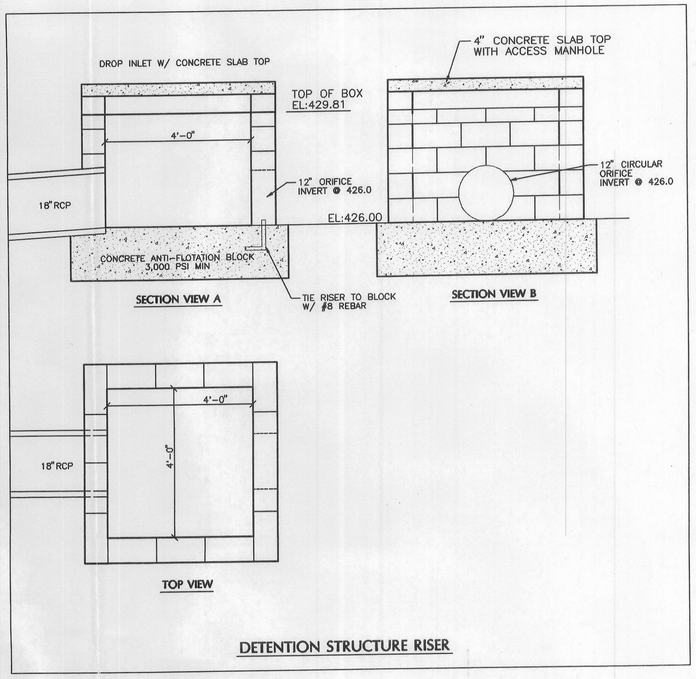




DETENTION STRUCTURE RISER

Summary of Calculations:

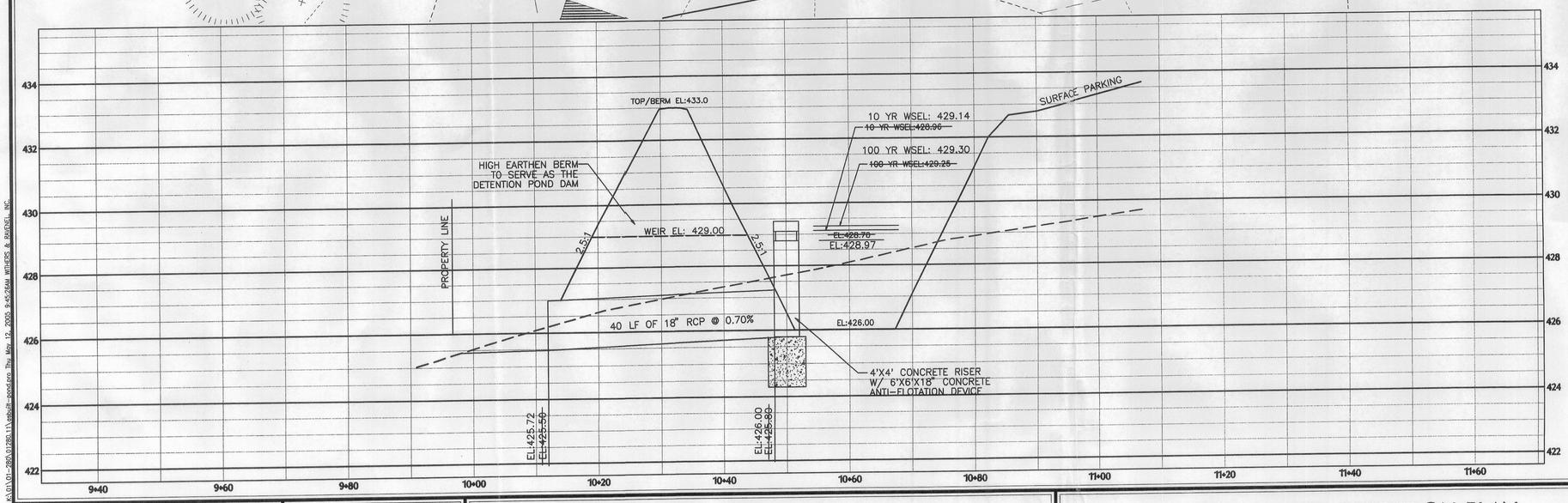
Maximum Allowable Impervious Area by Code : 12%
Actual Impervious Area : 17.1 %
Exceeds Allowable by 5.1%

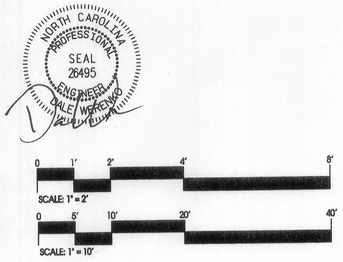
Dry Detention designed to attenuate post development 10-year, 24-hour Qpeak to less than or equal to 10-year Qpeak at 12% impervious area.

10-year, 24-hour Qpeak @ 12% impervious = 11.3 cfs
10-year, 24-hour Qpeak @ proposed w/pond = 11.2 cfs

Outlet Structure consists of 12-inch circular orifice located at invert of 4'x4' concrete riser with raised concrete top. Barrel is 18-inch dia RCP at 0.70%

100-yr WSEL = 429.30
10-yr WSEL = 429.14
2-yr WSEL = 428.25





No.	Revision	Date	By

Designer	W&R	Scale	1" = 10' HORIZ 1" = 2' VERT
Drawn By	JJM	Date	05/10/05
Checked By	DW	Job No.	201280.11

THE RECREATION CENTER AT STONEMOOR

BAYLEAF TOWNSHIP WAKE COUNTY NORTH CAROLINA

STORMWATER DETENTION PLAN & DETAILS- ASBUILT

WITHERS & RAVENEL
ENGINEERS | PLANNERS | SURVEYORS
111 MacKenan Drive Cary, North Carolina 27511 tel: 919-469-3340 fax: 919-467-6008 www.withersravenel.com

Sheet No. 1 of 1