



No.	Date	By	Designer	Scale
1	03/07/07	SFP	KAP	1" = 50'
2	04/25/07	JAC		
3	05/10/07	DLP		
4	08/10/07	JAC		
5	10/10/07	JEW		
GRADING & STORM REVISIONS			W&R	205261.04
GRADED & STORM REVISIONS			Checked By	Job No.
			MEC	02/06/07
			Drawn By	Date
			MYLAR	
			FIRST REVIEW COMMENTS	
			PER TOW & COR COMMENTS	
			Revision	

WENDELL FALLS

Wake County

North Carolina

STORM DRAINAGE & GRADING PLAN SF-1

WITHERS & RAVENEL
ENGINEERS | PLANNERS | SURVEYORS
111 Macklekena Drive Cary, North Carolina 27511 tel. 919-669-3340 fax 919-667-6008 www.witherand.com

Sheet No. **4.1**

GENERAL NOTES

1. ALL CONSTRUCTION SHALL BE IN ACCORDANCE WITH TOWN OF WINDSOR, ALABAMA/HOT SPOTS, AND THE TOWN OF WINDSOR, ALABAMA/STREETS/ROADS.
2. SLOPE AND WATER.
3. BOUNDARY AND TOPOGRAPHIC INFORMATION PROVIDED BY WINNERS & BARNETT, INC. THE INFORMATION SPECIFIED ON THE STAKES SHALL BE FOLLOWED WITH A TOLERANCE OF 20 FEET.
4. THE CONSTRUCTION SHALL CLEAR AND GRADE AS NECESSARY TO PROVIDE 15' X 20' SHOT DISTANCE TRAVELERS AND ALL INTERNAL SUBDIVISION STREET INTERSECTIONS.
5. CORNER SPACE WITHIN THE DEVELOPMENT SHALL BE MAINTAINED BY THE OWNER AND/OR SUBDIVISION.
6. NO PORTION OF ST-1 IS THE 100 YEAR 100-FOOT-ANNUAL FLOOD FREQ MAY 37201737500. DATED MAY 2, 2006.
7. ALL UTILITIES AND LINES EXPOSED 14" IN DEPTH OR MORE OF DEPTH.
8. ALL UTILITIES AND LINES WITHIN ROW SHALL BE LOCATED AND REINFORCED AND CONCRETE PIPE, SIMULATORS AND PIPES OUTSIDE OF ROW SHALL BE IN-PLANT BOXES AND PIPE. (OUTSIDE OVERSHOULDER WIDTH).

IMPERVIOUS SURFACE CALCULATIONS	
SF-1	
STREET'S	= 181.184 S.Q. FT.
DRIVEWAY'S	= 72.050 S.Q. FT.
SIDEWALKS	= 48.005 S.Q. FT.
HOUSES	= 156.317 S.Q. FT.
PATIOS	= 0 S.Q. FT.
TOTAL IMPERVIOUS SURFACE	= 457.556 S.Q. FT.
% IMPERVIOUS =	467,756 / (.4350 X 25,32) = 41.5 %

VELOCITY DISSIPATORS				
OUTLET	CLASS	LENGTH	WIDTH	THICKNESS
NUMBER	STONE	(ft)	(ft)	(in)
FES 101	B	12	6.8	22
FES 201	B or 1	20	10.5	22
FES 301	B	16	8.6	22

STRUCTURE									
FEES 101	255.00	248.00	NA	NA	248.00				
FEES 102	256.50	248.25	CB 109	NA	248.15				
CB 103	257.22	NA	CB 103	NA	252.83				
CB 104	258.30	252.12	CB 104	NA	252.82				
CB 105	258.50	251.75	CB 105	NA	251.00				
CB 106	259.48	255.50	CB 106	NA	256.10				
CB 107	259.85	257.75	CB 107	NA	256.10				
CB 108	259.85	257.75	CB 108	NA	256.50				
CB 109	259.85	257.75	CB 109	NA	256.50				
CB 110	259.85	257.75	CB 110	NA	256.50				
CB 111	259.85	257.75	CB 111	NA	256.50				
CB 112	259.85	257.75	CB 112	NA	256.50				
CB 113	259.85	257.75	CB 113	NA	256.50				
CB 114	259.85	257.75	CB 114	NA	256.50				
CB 115	259.85	257.75	CB 115	NA	256.50				
CB 116	259.85	257.75	CB 116	NA	256.50				
CB 117	259.85	257.75	CB 117	NA	256.50				
CB 118	259.85	257.75	CB 118	NA	256.50				
CB 119	259.85	257.75	CB 119	NA	256.50				
CB 120	259.85	257.75	CB 120	NA	256.50				
CB 121	259.85	257.75	CB 121	NA	256.50				
CB 122	259.85	257.75	CB 122	NA	256.50				
CB 123	259.85	257.75	CB 123	NA	256.50				
CB 124	259.85	257.75	CB 124	NA	256.50				
CB 125	259.85	257.75	CB 125	NA	256.50				
CB 126	259.85	257.75	CB 126	NA	256.50				
CB 127	259.85	257.75	CB 127	NA	256.50				
CB 128	259.85	257.75	CB 128	NA	256.50				
CB 129	259.85	257.75	CB 129	NA	256.50				
CB 130	259.85	257.75	CB 130	NA	256.50				
CB 131	259.85	257.75	CB 131	NA	256.50				
CB 132	259.85	257.75	CB 132	NA	256.50				
CB 133	259.85	257.75	CB 133	NA	256.50				
CB 134	259.85	257.75	CB 134	NA	256.50				
CB 135	259.85	257.75	CB 135	NA	256.50				
CB 136	259.85	257.75	CB 136	NA	256.50				
CB 137	259.85	257.75	CB 137	NA	256.50				
CB 138	259.85	257.75	CB 138	NA	256.50				
CB 139	259.85	257.75	CB 139	NA	256.50				
CB 140	259.85	257.75	CB 140	NA	256.50				
CB 141	259.85	257.75	CB 141	NA	256.50				
CB 142	259.85	257.75	CB 142	NA	256.50				
CB 143	259.85	257.75	CB 143	NA	256.50				
CB 144	259.85	257.75	CB 144	NA	256.50				
CB 145	259.85	257.75	CB 145	NA	256.50				
CB 146	259.85	257.75	CB 146	NA	256.50				
CB 147	259.85	257.75	CB 147	NA	256.50				
CB 148	259.85	257.75	CB 148	NA	256.50				
CB 149	259.85	257.75	CB 149	NA	256.50				
CB 150	259.85	257.75	CB 150	NA	256.50				
CB 151	259.85	257.75	CB 151	NA	256.50				
CB 152	259.85	257.75	CB 152	NA	256.50				
CB 153	259.85	257.75	CB 153	NA	256.50				
CB 154	259.85	257.75	CB 154	NA	256.50				
CB 155	259.85	257.75	CB 155	NA	256.50				
CB 156	259.85	257.75	CB 156	NA	256.50				
CB 157	259.85	257.75	CB 157	NA	256.50				
CB 158	259.85	257.75	CB 158	NA	256.50				
CB 159	259.85	257.75	CB 159	NA	256.50				
CB 160	259.85	257.75	CB 160	NA	256.50				
CB 161	259.85	257.75	CB 161	NA	256.50				
CB 162	259.85	257.75	CB 162	NA	256.50				
CB 163	259.85	257.75	CB 163	NA	256.50				
CB 164	259.85	257.75	CB 164	NA	256.50				
CB 165	259.85	257.75	CB 165	NA	25				

