ROLLANS ***Soil & Environmental Services, Inc.***

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Trish Angoli,

Rollans Soil & Environmental Services has been contracted to design an amenities area septic system for Bells Crossing Subdivision in the southern part of Iredell County. According to 15A NCAC 18A .1949(b) (Sewage Flow for Design Units) the design flow for a pool is 10 gallons per 15 square feet of pool area. The proposed amenities area will include a pool that is 3198 square feet and a community building. Enclosed is a floor plan for a building that will serve as a bath house and a community HOA meeting area with a kitchen area that has a refrigerator and sink only. Also attached is a copy of the proposed subdivision layout with the amenities location and layout for approximately 204 lots.

Also provided is water data for a 344 lot subdivision amenities area that has a comparable pool size and community building. There are 12 consecutive months of data and 43 consecutive daily readings from June 24 through August 5. The average daily flow for the consecutive daily readings is 0.50gal/lot, with June being the highest monthly reading of 4.83gal/lot. We are proposing a flow of 5 gallons per lot to satisfy the peak monthly reading from the data provided for a total of 1020 gallons per day.

Please let me know if there is anything else you need or anything we need to do to help you make a decision in this matter.

Thanks,

Brady Freeman
704-746-6497

cc: Judy Melville

'arbour Amenity system water readings and summary.

Date	Water Meter Reading (gal)	water use by pool and septic system (gal)	Pool Meter Reading (gal)	Water use by pool only (gal)	actual water to septic system (gal)	Approx.water use Per home (344 lots) (gal/lot)	
24-Jun	1727300						
25-Jun	1727980	680			680	1.98	
26-Jun	1728760	780			780	2.27	
27-Jun	1729830	1070			1070	3.11	
28-Jun	1730870	1040			1040	3.02	
29-Jun	1731050	180			180	0.52	
30-Jun	1731300	250			250	0.73	
1-Jul	1732600	1300			1300	3.78	
2-Jul	1733750	1150			1150	3.34	
3-Jul	1734030	280			280	0.81	
4-Jul	1734350	320			320	0.93	dates prior to
5-Jul	1734520	170	634670		170	0.49	Jul. 5 do not
6-Jul	1734820	300	634670	0	300	0.87	reflect sub. of
7-Jul	1735030	210	634850	180	30	0.09	pool water.
8-Jul	1735910	880	635290	440	440	1.28	
9-Jul	1736050	140	635290	0	140	0.41	
10-Jul	1736130	80	635290	0	80	0.23	
11-Jul	1736720	590	635640	350	240	0.70	
12-Jul							
13-Jul	1737290	570	635640	0	570	1.66	sat +sun
14-Jul	1737690	400	636030	390	10	0.03	
15-Jul	1738440	750	636700	670	80	0.23	
16-Jul	1738520	80	636700	0	80	0.23	
17-Jul	1738730	210	636700	0	210	0.61	
18-Jul	1740350	1620	638290	1590	30	0.09	
19-Jul	1740500	150	638290	0	150	0.44	
20-Jul	1740610	110	638290	0	110	0.32	
21 Jul	1740700	90	638290	0	90	0.26	
22-Jul	1741240	540	638740	450	90	0.26	
23-Jul	1741360	120	638740	0	120	0.35	
24-Jul	1741450	90	638740	0	90	0.26	
25-Jul	1742040	590	639250	510	80	0.23	
26-Jul	1742210	170	639250	0	170	0.49	
27-Jul	1742280	70	639250	0	70	0.20	
28-Jul	1743310	1030	639250	0	1030	2.99	
29-Jul	1743440	130	639250	0	130	0.38	
30-Jul							
31-Jul							
Aug	1774790	31350	668690	29440	31350	91.13	pool filter prob
Aug	1774950	160	668690	0	160	0.47	refilling pool.
Aug	1774990	40	668690	0	40	0.12	
Aug	1775040	50	668690	0	50	0.15	
Aug	1775070	30	668690	0	30	0.09	
	Average	**335**			**171**	**0.50**	avg. from July 5 to Aug 5 excluding July 30-31 and Aug 1

Harbour Amenity Monthly Water Use Summary

Month	Water Use (Gal.)	Approx. Daily Use (gal)	Approx. Daily use per lot (gal)
Jun-02	49810	1660	4.83
Jul-02	23540	841	2.44
Aug-02	13700	381	1.11
Sep-02	8310	277	0.81
Oct-02	5930	180	0.52
Nov-02	840	29	0.08
Dec-02	19650	634	1.84
Jan-03	2680	74	0.22
Feb-03	190	6	0.02
Mar-03	410	16	0.05
Apr-03	2280	76	0.22
May-03	5960	199	0.58
Jun-03	12280	384	1.12

These number include any water used at the pool that did not enter the septic system. The Jun, July, and Aug number are probably artifically high due to this. There may have been a plumbing problem in December because this number also seems high.